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# **Hypermodernism**

**John Armitage**

**A submission in partial fulfilment of the requirements of Northumbria University  
for the degree of Doctor of Philosophy by published work**

**October 2002**

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1. List of the published work on which the application is based.

1. John Armitage (1997), 'Accelerated Aesthetics: Paul Virilio's The Vision Machine', in Angelaki, volume 2, number 3, Intellectuals and Global Culture, edited by Charlie Blake and Linnie Blake, pp 199-209; ISBN: 1 899567 05 4; ISSN: 0969 725X.
2. John Armitage (1999), 'Resisting the Neoliberal Discourse of Technology: The Politics of Cyberculture in the Age of the Virtual Class', in CTHEORY, volume 22, number 1-2, Article 68, edited by Arthur and Marilouise Kroker, pp 1-8; (CTHEORY is an international peer-reviewed electronic journal of theory, technology, and culture; <http://www.ctheory.net/>).
3. John Armitage (1999), 'Editorial Introduction: Machinic Modulations: new cultural theory & technopolitics', in Angelaki, volume 4, number 2, Special Issue on: Machinic Modulations: New Cultural Theory & Technopolitics, guest edited by John Armitage, pp 1-16; ISBN: 0-902879-26-X; ISSN: 0969 725X.
4. John Armitage (1999), 'Dissecting the Data Body: An Interview with Arthur and Marilouise Kroker', in Angelaki, volume 4, number 2, Special Issue on: Machinic Modulations: New Cultural Theory & Technopolitics, guest edited by John Armitage, pp 69-74; ISBN: 0-902879-26-X; ISSN: 0969 725X.



5. John Armitage (1999), 'Ontological Anarchy, The Temporary Autonomous Zone, and The Politics of Cyberculture: A Critique of Hakim Bey', in Angelaki, volume 4, number 2, Special Issue on: Machinic Modulations: New Cultural Theory & Technopolitics, guest edited by John Armitage, pp 115-128; ISBN: 0-902879-26-X; ISSN: 0969 725X.
  
6. John Armitage (1999), 'Paul Virilio: An Introduction', in Theory, Culture & Society, (TCS), volume 16, numbers 5-6, Special Issue on: Paul Virilio, guest edited by John Armitage, pp 1-23; ISSN 0263-2764. This article and the TCS Special Issue on Paul Virilio was subsequently published in book form as: John Armitage (ed) (2000), Paul Virilio: From Modernism to Hypermodernism and Beyond. Sage Publications in association with Theory, Culture & Society. ISBN: 0 7619 5901 7(hbk); ISBN: 0 7619 5902 5 (pbk).
  
7. John Armitage (1999), 'From Modernism to Hypermodernism and Beyond: An Interview with Paul Virilio', in Theory, Culture & Society, volume 16, numbers 5-6, Special Issue on: Paul Virilio, guest edited by John Armitage, pp 25-55; ISSN 0263-2764. This interview and the TCS Special Issue on Paul Virilio was subsequently published in book form as: John Armitage (ed) (2000), Paul Virilio: From Modernism to Hypermodernism and Beyond. Sage Publications in association with Theory, Culture & Society. ISBN: 0 7619 5901 7(hbk); ISBN: 0 7619 5902 5 (pbk).

8. John Armitage (2000), 'Beyond Postmodernism? Paul Virilio's Hypermodern Cultural Theory', in CTHEORY, volume 23, number 3, Article 90, edited by Arthur and Marilouise Kroker, pp 1-17; (CTHEORY is an international peer-reviewed electronic journal of theory, technology, and culture; <http://www.ctheory.net/>).
  
9. John Armitage (2001), 'Economies of Excess', in parallax 18, volume 7, number 1, Special Issue on: Economies of Excess, guest edited by John Armitage, pp 1-2; ISSN 1353-4645.
  
10. John Armitage and Phil Graham (2001), 'Dromoeconomics: Towards a Political Economy of Speed', in parallax 18, volume 7, number 1, Special Issue on: Economies of Excess, guest edited by John Armitage, pp 111-123; ISSN 1353-4645.
  
11. John Armitage (2001), 'Project(ile)s of Hypermodern(organ)ization', in ephemera: critical dialogues on organization, volume 1, number 2, edited by Steffen G. Bohm, pp 131-148; ISSN 1473-2866; (ephemera: critical dialogues on organization is an international peer-reviewed electronic journal of critical management and organization; [www.ephemeraweb.org](http://www.ephemeraweb.org)).
  
12. John Armitage (2001), 'Introduction', in John Armitage (ed) (2001) Virilio Live: Selected Interviews, Sage Publications in association with Theory, Culture & Society, pp 1-11; ISBN 0 7619 6859 8 (hbk); ISBN 0 7619 6860 1 (pbk).

13. John Armitage (2001), 'The Kosovo W@r Did Take Place', in John Armitage (ed) (2001) Virilio Live: Selected Interviews, Sage Publications in association with Theory, Culture & Society, pp 167-197; ISBN 0 7619 6859 8 (hbk); ISBN 0 7619 6860 1 (pbk).

## 2. Summary of the contribution to knowledge represented by the published work.

This PhD submission by previous publication comprises independent critical work from 1997-2001 on 'hypermodernism'. Hypermodern 'new cultural theory' and 'technopolitics' designates a rejection of the binary opposition between modernism and postmodernism as a response to the crises of contemporary culture. Hypermodernism thus refuses the prefix 'post', substituting instead the prefix 'hyper' or 'excess'. Hypermodernism is neither a denial of the domineering epistemological optimism of modernity nor a dismissal of the peremptory theoretical pessimism of postmodernity. Rather, it is an original analytical engagement with and acceptance of 'double moments' of cultural affirmation and negation or 'the continuation of modernism by other means'.

The contribution to knowledge represented by the published work is the innovative interpretation and extension of hypermodernism to 'new social theory' and technopolitics. It delineates the renunciation of the binary antagonism between modernity and postmodernity through an acknowledgement of the exigencies of 'hypermodernity'. The premise of hypermodernity is confirmed through the prefix 'hyper' and the discovery of the 'economies of excess'. Hypermodernity therefore integrates the hope of 'dromoeconomics' with the despair of the 'project(ile)s of hypermodern(organ)ization'. Here, autonomous critical abilities and the recognition of double moments of social confirmation and contradiction are understood as 'the continuation of modernity by other means'.

The concluding section of the PhD submission deals with recent work from 2001 that explores the hypermodern. New cultural, social and technopolitical theory is positively applied to the reaction of the French cultural theorist, Paul Virilio, to the 'strategies of deception'. Hypermodernism repudiates the prefix 'postmodern war', exchanging it for the assertion that 'The Kosovo W@r Did Take Place', merging a critique of the promises of the modern Persian Gulf war and the despondency of postmodern 'cyberwar'. Finally, individual evaluative powers partake of and identify such double moments as the 'orbital space' of the 'integral accident' or 'the continuation of politics by other means'.

3. A critical appraisal submitted in partial fulfilment of the requirements of the University of Northumbria at Newcastle for the degree of Doctor of Philosophy by published work.

This PhD submission constitutes the findings of my research conducted into hypermodernism. I undertook it as an academic member of staff in the Division of Government & Politics, School of Social, Political and Economic Sciences, Faculty of Social Sciences, at the University of Northumbria between 1997-2001. The submission comprises fourteen texts made up of ten single authored journal articles, one jointly authored article, two single authored book chapters and the current critical appraisal. The list of the thirteen published works on which the application is based includes: 'Accelerated Aesthetics: Paul Virilio's The Vision Machine'; 'Resisting the Neo-liberal Discourse of Technology: The Politics of Cyber Culture in the Age of the Virtual Class'; 'Editorial Introduction: Machinic Modulations: New Cultural Theory & Technopolitics'; 'Dissecting the Data Body: An Interview with Arthur and Marilouise Kroker'; 'Ontological Anarchy, The Temporary Autonomous Zone and The Politics of Cyberculture: A Critique of Hakim Bey'; 'Paul Virilio: An Introduction'; 'From Modernism to Hypermodernism and Beyond: An Interview with Paul Virilio'; 'Beyond Postmodernism? Paul Virilio's Hypermodern Cultural Theory'; 'Economies of Excess'; 'Dromoeconomics: Towards a Political Economy of Speed'; 'Project(ile)s of Hypermodern(organ)ization'; 'Introduction'; and 'The Kosovo W@r Did Take Place'.

Part I of this critical appraisal, 'The Research Programme', is a statement of its aims and offers an account of the research programme, an examination of its essential elements, and a composite of the texts as a systematic work. Initial publications on hypermodern themes helped to lay the groundwork, especially the shift from human to technological vision, and the inauguration of 'cyborgs' and 'new media' as important fields of cultural and social investigation (Armitage, 1996a, 1996b, 1997a and 1997b). Formative research papers in the emerging hypermodern domain were presented at a variety of conferences (Armitage, 1997c and 1997d). Subsequently published, the papers served as the source of the original assertions of the conceptual claims on which the programme is founded and also became the first two articles included in this submission. The conference presentations and the debates over their published arguments encouraged me to further my conception of hypermodernism by published work.

Part II of this critical appraisal presents a statement of 'The Significant Contribution of the Original Work to the Advancement of the Field of Study' that also incorporates an explanation of my recent research on the cultural and theoretical, technopolitical and social features of the hypermodern condition.

The research programme on hypermodernism grew from an increasing sense that the contemporary development of new cultural theory and technopolitics required a methodology that refused the binary opposition between modernism and postmodernism. Consequently, seeking to react to the predicament of modern culture, I aimed to reject the prefix 'post' and to

consider how particular features of modernism, generally thought to be extinct, originated from 'hyper' or 'excessive' modern forms. I also aimed to focus my hypermodern thesis neither on the theoretical optimism of modernity or on the theoretical pessimism of postmodernity but on a radical expository investigation of the inherent ambivalence of contemporary culture. This was achieved through my independent and original contributions to knowledge in refereed journals of high academic standing such as Angelaki, Theory, Culture & Society, parallax and CTHEORY. Disseminating my provisional hypermodern theses at international conferences, in international journals, in book chapters and online mailing lists such as Cyber-Society-Live also helped to formulate the body of the research programme outlined below (Armitage, 1998; 1999a; 1999b; 1999c; 1999d; 2000a; 2000b; 2000c; 2000d; 2000e; 2000f; 2000g; 2001a; 2001b; 2001c and 2001d).

### I. The Research Programme

The first article, 'Accelerated Aesthetics: Paul Virilio's The Vision Machine', asks whether there is an aesthetics particular to Virilio's 'dromology' (the logic of speed), and presents an ambivalent answer. Against Virilio's innovative understanding of contemporary vision technologies, the article suggests that his methodologies are lacking a sound theoretical framework from which these innovations might be elaborated and used critically. Virilio is characterised as a useful if disturbing Catholic intellectual presence but one seeking pre-modern solutions to the postmodern problems of vision technologies.



‘Resisting the Neo-Liberal Discourse of Technology: The Politics of Cyberculture in the Age of the Virtual Class’ considers the ambivalence of Virilio’s conception of speed in the circumstances of the transition from the liberal to the neo-liberal discourse of technology. Here, neo-Marxian influenced questions concerning technology are restructured for a tentative hypermodern politics of cyberculture. For, together with the emergence of cybernetic technologies, the virtual class has begun to supersede the liberal discourse of speed through its intensification of the accelerated processes of virtualisation.

The present research programme gathered pace through my efforts to uncover a method that might be sufficient for the advent of hypermodernism. Moreover, the publication of Angelaki 2 (3), Intellectuals and Global Culture, to which I was a contributor (Armitage, 1997e), convinced me to guest edit a Special Issue of Angelaki entitled Machinic Modulations: New Cultural Theory & Technopolitics.

‘Editorial Introduction: Machinic Modulations: New Cultural Theory & Technopolitics’ presents an original methodological assertion. It suggests that postmodern cultural theories of technology are ceding to new hypermodern cultural analyses and technopolitics, a suggestion deduced from the ‘machinic modulations’ of contemporary technocultural and technopolitical practices influenced by Marxist, postmodern and hypermodern theories (e.g., Witheford, 1997; Baudrillard, 1998 and Kroker, 1992). Arguing for the importance of theorising technology in the determination of new cultural and political practices, the article offers a ‘recombinant’ approach to technology that rejects the

construction of large theoretical systems, questions the concept of technological determinism and broadly supports the emergence of a poststructuralist influenced hypermodern technopolitics. The article therefore represents a shift away from postmodern and Marxian conceptions of culture, technology and politics towards hypermodern new cultural theory and technopolitics.

This shift is the central theme of 'Dissecting the Data Body: An Interview with Arthur and Marilouise Kroker'. In voicing speeding methods of investigation and revealing the basis of hypermodernism, the article views the contemporary fascination with biotechnology as connected to a refutation of the twofold hostility between modernism and postmodernism and a variety of 'excessive' artistic and philosophical, scientific and epistemological movements. Here, the Kroker's 'hypermodernisation' of cultural theory is characterised technologically as neither a commendation nor a critique of modernity and postmodernity. To be more precise, the article seeks an understanding of bio and other technologies that recognises and accepts 'double moments' of cultural affirmation and contradiction that is consistent with the persistence of modernism as hypermodernism. Concluding with the phrase 'recombinant theory for a recombinant time', the interview poses fresh questions about technology that go beyond Marxian modernism, 'cyberfeminism' and Baudrillard's postmodernism. Further loosening the programme's critique of technology from its dependence on Marxism, the article also reconfigures feminist and Baudrillardian conceptions of technology through the prism of hypermodernism.

Throughout the 1990s, 'New Anarchism' denounced the lack of serious critiques of technology within contemporary radical political practices, inclusive of new 'ontological' or 'post-leftist anarchy' (Bey, 1991; Black, 1997). Initially presented as a conference paper, 'Ontological Anarchy, The Temporary Autonomous Zone, and The Politics of Cyberculture: A Critique of Hakim Bey' is noteworthy as the first published analysis of Bey's influential writings and the hypermodern thesis that his technopolitical theories are not intellectually radical but conservative (Armitage, 1998). Furthermore, the article argues that Bey's work fails to grasp the emergence of what Virilio labels 'globalitarianism' and the continuing importance of the modern state. Underestimating the significance of class struggle while misappropriating a good deal of modern libertarian thought, Bey's writings, it is suggested, result in a problematic account of recent developments within technopolitics. Marking a transition from Marxism to autonomous Marxism through a critical foray into New Anarchism, the article is also important for its ongoing appreciation of Virilio's hypermodern thought concerning technopolitics.

One result of this ongoing appreciation was my guest editorship of a Special Issue of Theory, Culture & Society on Paul Virilio (Armitage, 1999a), the first article of which is 'Paul Virilio: An Introduction'. This article is a critical overview of Virilio's cultural conceptions of urbanism and speed, culture, technology and war. It develops the themes of 'Ontological Anarchy' through its focus on the absolute significance of the concept of 'military space' to the emergent 'dromocratic condition'. Whilst 'Ontological Anarchy' had employed

the concept of globalitarianism, it did so by contrasting it with Bey's notion of 'too-late capitalism'. Inflected by Bey's writings on the concentration of ownership and control of media conglomerates, 'Ontological Anarchy' argued that globalization should be contemplated neither as cyberspace nor as conglomeration but as globalitarianism. The metamorphosis of this latter concept into considerations on military space was a consequence of deliberations on the dromocratic condition in which modernism, and particularly hypermodernism, are so profoundly entangled with the processes of globalization and the war machine. The article is also notable for my provisional but crucial and independent definition of hypermodernism and for my claim that Virilio's cultural theory addresses the 'cultural logic of late militarism', a claim that also emphasises the need for a phenomenological critique of speed and war.

'From Modernism to Hypermodernism and Beyond: An Interview with Paul Virilio' was therefore the outcome of a variety of precursory conference papers, articles and sustained reflection. Originally advanced in 1996 as a contribution to a proposed 'Special Section on Paul Virilio' for Theory, Culture & Society, the idea of an interview with Virilio readily found support from the editorial board because the connections between modernism, hypermodernism and Virilio's cultural and social theory were becoming ever more self-evident. That Virilio's writings, first published in France in the 1960s, were still the province of a cultural avant-garde over thirty years on also help to explain the positive response of the editorial board to my proposal. Multidisciplinary in scope and ranging over numerous sub-disciplines of cultural and social theory,

the extended interview questions Virilio about his biographical and intellectual history, covering topics as varied as postmodernism and phenomenology, architecture, Nietzsche, globalitarianism, speed, technological culture and war. The thesis of the interview, confirmed by Virilio, is that his work can be characterised as hypermodern. That is, it is principally concerned with the intensification and displacement of traditional ways of thinking about the contemporary world and its representations. Of course, the procedure of preparing for the interview, of research and the formulation of relevant questions was on return from Paris followed by the stages of transcription, translation and editorial work on the text of the interview and the other contributions to the project.

This was because, by 1997, and with the encouragement of Theory Culture & Society, I had begun to obtain the collaboration of a number of highly distinguished international cultural and social theorists with the Virilio project. As a result, Neil Leach and Mike Gane, Douglas Kellner, Sean Cubitt, Scott McQuire, Patrick Crogan, Nicholas Zurbrugg, Verena Andermatt Conley and James Der Derian all contributed to the development and success of the Special Issue of Theory Culture & Society on Virilio. Published in October 1999, two years after my interview with Virilio, the Special Issue was subsequently also published by Sage in book form as Paul Virilio: From Modernism to Hypermodernism and Beyond (Armitage, 2000b). Making use of use Virilio's theoretical work on architecture and military space, war, technology, new media, speed, the accident, technoculture, feminism and

politics, it is the first book to offer a properly critical examination of his cultural theory. Containing substantial evaluations of Virilio's ideas from his early assertions on military space to his recent writings on The Information Bomb (Virilio, 2000a), the volume provides an original and indispensable insight into Virilio's hypermodernism. Similarly, the provocative critical approach of many of the contributions to the book, together with their use of contemporary cultural and social theory to examine and question Virilio's ideas, were intended to create that sort of escalation and dislocation that the programme argues is the trademark of hypermodern thought. These collaborations and contributions, with the addition of my own 'Paul Virilio: A Select Bibliography' (Armitage, 1999b), are an essential ingredient of the research programme as well as an enlargement of the achievement of its results.

Notwithstanding its significant focus on innovative areas of analysis within critical cultural and social theory, above all postmodernism and hypermodernism and the expansion of relativity theory into the critique of phenomenology and Marxism, the findings of my interview with Virilio are manifold. To begin with, there is the refutation of the widespread misunderstanding of Virilio's writings by postmodern cultural and social theorists such as Gibbins and Reimer (1999), misunderstandings that contain a succession of unexamined claims that cannot be endorsed without careful re-examination. Amongst these is the categorisation of Virilio's cultural and social theory as poststructuralist or postmodern cultural and social theory. To such erroneous characterisations we can also add the misinterpretation of Virilio's phenomenology as Nietzscheanism, the invalid idea

that postmodernity is a central organising conceptual tool of his cultural theory and the flawed assumption that Virilio and Baudrillard's thoughts on numerous concepts, inclusive of simulation, are in accord. In the interview, Virilio also criticises the postmodernization of architecture and Marxism, cyberspace, power, speed, pure war, globalitarianism, the integral accident, the aesthetics of disappearance, war and cyberfeminism. In so doing, Virilio conveys his conviction that theories such as postmodernism, Marxism and poststructuralism are ineffective as forms of resistance to globalitarianism. However, the interview also positively argues that hypermodernism should concern itself with the accidents and catastrophe of war, with the acceleration of history, the critical analysis of modernity, technology and the integral accident rather than postmodernity. Accordingly, the primary discovery of the interview is that new theorisations facilitated by the hypermodern entail research methods that are separate and inventive contributions to learning. Similarly, in order for such theorisations to thrive, a continuous level of research effort into hypermodernism is necessary that discards the binary antagonism between modernism and postmodernism as a reaction to the calamities of present-day ways of life.

As a result, in 'Beyond Postmodernism? Paul Virilio's Hypermodern Cultural Theory', this argument is developed through a discussion of Virilio's cultural theory and the contention that his deliberations are misunderstood by various postmodern cultural theorists. In this way, and following the pioneering writings of the Kroker's, the article maintains the theoretical division noted in

‘Machinic Modulations’ between postmodern and hypermodern theory and the phenomenological fusion of biography and cultural theory discussed in ‘Paul Virilio’. Nonetheless, this article is more unequivocal than former critiques in its insistence that Virilio’s work exists beyond the vocabulary of postmodernism and must be envisaged as a contribution to the rising debate over hypermodernism. Like the research programme overall, the article is firm in its repudiation of the prefix ‘post’ and in the detection of a ‘hyper’ or ‘excessive’ modernism. Rather than merely opposing postmodernism, the article aims to chart the critical contributions Virilio has made to existing cultural theory. Moreover, the assessment of Virilio’s hypermodernism is also linked to my estimation of the disagreements about his writings. However, the article also recognises that Virilio’s hypermodernism is starting to merge with the thinking of the Krokers, a recognition that his hypermodernism deals with a number of significant and troubling developments characteristic of contemporary cultural life. One such development is the authority of what I label the ever more virtual ‘global kinetic elites’ over the political and economic formation of the all too real corpses of the ‘(s)lower classes’. Developments such as this, it is argued, are hypermodern to the degree that they are devoted to safeguarding the cultural logic of contemporary militarism. After Virilio’s revelation of what is vital about the dromological, political and economic situation of the twenty-first century, this critical reading of modernity is identified with the military conception of history. In the conclusion, though, it is maintained that the idea of hypermodernism



must be paramount in any appreciation of Virilio's specific contribution to contemporary cultural theory.

In developing this method of hypermodern cultural theory, the programme takes as its next focus of research the innovative and interpretative concepts of 'new social theory' and technopolitics. Examination of the binary opposition between modernity and postmodernity points the way to the recognition of the pressures of what I call 'hypermodernity'. The hypothesis of hypermodernity is endorsed through the prefix 'hyper' and the detection of the 'Economies of Excess'.

As a consequence, in my guest editorial of a theme issue of parallax on the 'economies of excess' (Armitage, 2001a), I sought to focus on the economic works of the French cultural theorist Georges Bataille (1897-1962) and his distinctive Nietzschean-Hegelian or excessive concepts. Foucault (1977), Derrida (1981) and Baudrillard's (1993) 'excessive' readings of Bataille, for example, diverge from the 'restricted' type of Marxian political economy, and concur with Bataille's 'general economy' or a planetary excess that should not be accumulated but wasted (Bataille, 1985, 1991). Within Bataille's general economy, however, it is 'profitless expenditure' that has received least consideration from contemporary cultural theorists. What is more, it is the analysis of former kinds of profitable expenditure by Bataille that demonstrates how the founding of 'potlatch' -- gift-giving ceremonies in American Indian societies -- can revive even modern-day economic interactions between technologically sophisticated and embryonic industrialized societies. Profitless

expenditure therefore structures this and the other articles in the issue that is dedicated to the development of the economies of excess. The issue consequently supplies a major contribution to the examination of cultural and socio-economic configurations as well as to the study of excess energy as a fundamental attribute of contemporary economic arrangements. In modern cultural theory, and to some degree in new social theory and technopolitics, political economy is characterised, in a convention drawn from Marx, as the distribution and accumulation of economic surplus. The investigation of political economy offered here, though, perceives political economy and the economies of excess as only partly directed and certainly not restricted to the texts of Marx. For what Marx and Bataille, Baudrillard, Nietzsche and Virilio relate to in different ways are the excesses and surpluses of the general economy, to the superfluous energy of excess expenditure that is consistent with the political and economic emancipation from prior limitations and more or less all human understanding. Discerning self-sacrificial and all but sacred cultural thinking and rituals, some articles in the issue encourage profitless expenditure while others, including the article under discussion, question the postmodern assumptions of the disastrous contemporary political and economic connections between developed and developing economies. The article concludes with an exploration of Bataille's critique of friendship, unknowing, excess, Nietzsche and technology before discussing feminism, globalization and child adoption. Arguing that Virilio's political economy of speed and Marx's political economy of wealth might well be compatible, the article sets the stage for the hypermodern

incorporation of the dream of 'dromoeconomics' or the political economy of speed with the desolation of the 'project(ile)s of hypermodern(organ)ization'.

'Dromoeconomics: Towards a Political Economy of Speed', an article jointly written with Phil Graham, contends that in spite of superficial manifestations, 'Virilian' and Marxian theory are both occupied with extremely important work on dromoeconomics. Even so, the article concentrates on a political economy of speed that deviates significantly from postmodern models of political economy and from conventional Marxian methodology. This hypermodern article reasons that the conflicting influences of war and international trade guide the need for a hypothesis of dromoeconomics. Additionally, the article argues that these seemingly opposing but really mutually dependent forces achieve their 'suspension' in an organisational type of illogicality named 'hypermodern managerialism', an advanced form of 'sociopathic managerialism'. By way of an investigation of dromoeconomics, the article points to the hypermodern managerialist call for a political economy of excess speed, so that the critique of political economy develops into, through Virilio and Marx, dromoeconomics. Nevertheless, the article also considers excess speed and overproduction and, as confirmation of the hypermodern perspective, illustrates the significance of human conflict as the foundation of international trade and the suspension of these adverse forces. The foundations for hypermodern managerialism subsist in the present-day as the need for speed. These foundations are the irrational circumstances for a suspension in which the antithetical pressures between war and trade are the conditions for hypermodern

managerialism. Associated with war and trade, excess speed, the obliteration of space by time and the contemporary situation of humanity, the conceptual problems innate in synthesising the work of Virilio and Marx awaited further enhancement until the writing of my next article.

In 'Project(ile)s of Hypermodern(organ)ization', the ephemeralization of organisations and institutions is reflected upon together with the implications of ephemeral surroundings. In this hypermodern article, I argue that we are presently observing the destruction of the time-space of the private and the public, the peaceful and the warlike, owing to the initiation of 'hypermodern(organ)ization'. Tracking the latter idea, three 'project(ile)s' are identified, specifically, 'hypercapitalism', globalitarianism and 'militarization' as the crucial apparatus of an evolving hypermodernity. Proposing that dromoeconomics, the economies of excess and interrelated ideas such as 'ephemeral commodities' and the 'hypermodern city' can only be appreciated within the framework of 'total mobilization', the article reveals yet again the productiveness of Virilio's hypermodern conceptions. Nonetheless, globalitarianism is augmented here by the Deleuze and Guattarian (Goodchild, 1996) inflected terminology of 'molar' and 'molecular' project(ile)s while the assessment of the military origins of industrialisation is related to the conflict that was the Kosovo war. This hypermodern interpretation, of course, also functions to exemplify an opposition to postmodern ideas about globalization and the crisis of the nation state. The globalitarianism taken up in earlier articles is here developed and reconfigured through a discussion of Virilio's (2000b) notion of

'Pentagon Capitalism' and Chomsky (2000) and Bauman's (2001) critical deliberations on universal 'human rights'. Lingis' (1984; 2000) phenomenological works on 'phallogentrism' are also considered, along with those of the 'anarchitect' Woods (2000) on 'everyday war' in the hypermodern city. It is a consideration that authorises the conclusion that the project(ile)s of hypermodern(organ)ization can be characterised within Lingis' 'institution of the dimension of verticality' and Virilio's globalitarianism or 'the face of hypermodern(organ)ization man'. In short, the article is an experimental effort at disturbing contemporary forms of thought regarding the excesses of modern organizations. Hypermodern(organ)ization, then, encourages the development of the project(ile)s of hypermodernity, for example in the way that hypercapitalism hazards becoming completely globalitarian, becoming militarization. Questioning the multiple exteriors presented by the face of hyper(organ)ization man only enhances the hypothesis of the project(ile)s of hypermodern(organ)ization that business corporations and organizations currently run the risk of being converted into militaristic, hypercapitalist and globalitarian institutions. Contrary to the aims of the global kinetic elite, then, the double moments that are the project(ile)s of hypermodern(organ)ization can be recognised as the source of an alternative conception of modernity, hypermodernity.

The 'Introduction' to my edited book, Virilio Live: Selected Interviews (Armitage, 2001f), commences with a summary of Virilio's cultural theory and his understanding of the military-industrial complex. Other contemporary cultural theorists such as Baudrillard, the chapter explains, have also strongly

endorsed Virilio's concept of dromology. Yet, the chapter argues while Virilio's progressively dominant and demanding speculations have afforded the basis for texts such as Strategy of Deception, they have also habitually developed into a source of repeated argument and academic dispute within cultural theory.

Virilio's hypermodern work is not, though, directed by the normal conventions of old or new cultural, social and technopolitical thought, but more readily behaves like a stream of consciousness in which disturbing ideas are frequently discharged at a heady pace. In the interview situation, however, Virilio manages to apply and to alleviate some of the results of this stream of consciousness.

Accordingly, the chapter suggests that, by presenting readers with Virilio's cultural theory in interview form, a novel means of attempting it can be made available. Conversely, like Virilio's writings and lectures, his interviews also add to a sequence of arguments produced from his life history, from the impact of his conjectural developments, and from his difficult and regularly misapprehended cultural assumptions. Thus the fundamental cultural subjects of Virilio's notable theoretical offerings come to life in the twelve interviews chosen for the book. One difficulty is the issue of the theoretical explanation of the interviews. Study of the interviews indicates that the duty of the editor is as much that of clarification as it is of interpretation. Recent considerations of postmodernism obviously favour 'post' over 'hyper' but in so doing create dual hostilities between modernism and postmodernism. Virilio's interviews, though, are not postmodern but hypermodern, by which I mean they are excessively modern and therefore somewhat removed from postmodern culture. In

opposing the comprehensive censure of the hopefulness of modernity representative of postmodern thought, the chapter argues, Virilio designates that alternative cultural and social values can be induced in place of the cynicism of postmodernity. Such values accept that any inventive critical engagement with contemporary culture must admit double moments of encouragement and exclusion.

Part I of this critical appraisal concludes with the application of hypermodern new cultural, social and technopolitical theory to the response of Virilio to the 'strategies of deception'. As in my hypermodern interview with Virilio, in 'The Kosovo W@r Did Take Place', Virilio talks about his current work, specifically Strategy of Deception and The Information Bomb. In his 'position statement' that precedes this interview, Virilio makes an appraisal of the informational and techno-scientific plans enacted in the Kosovo war of 1998-9 by the allied forces against Slobodan Milosevic's Serbian regime. All the same, as Virilio testifies in the statement, his is a critical assessment of what he terms 'strategically correct thinking', the combining of humanitarian and military interactions. Dismissing the idea of 'postmodern war', Virilio nevertheless portrays the United States (US) as having had a 'successful' war in Kosovo through a discussion of his prior examination of the possibilities that were inherent in the modern Persian Gulf war and his contemporary analysis of the hopelessness of postmodern 'cyberwar'. For Virilio, therefore, cyberwar is a mode of US imperialism that is currently accomplished due to the advancement and use of the Pentagon's 'Revolution in Military Affairs' (RMA) and what he

now identifies as the 'military-scientific complex'. In fact, Virilio argues that by deserting the political awareness essential to the functioning of the US' 'second deterrence' founded on cyberwar, the European Union and NATO have at last surrendered to the explosion of the information bomb. The hypermodern question of double moments, already brought to bear in preceding articles, is here identified as the 'orbital space' of the 'integral accident'. Actions such as those performed by private militias in Kosovo clearly indicate the road contemporary political events are embarking on. However, the most important illustration is that of orbital space or the 'automation of warfare', characterised as a 'war in the air', and symbolised by the advanced development of the RMA. Connected to the imminent integral accident and the catastrophic potential intrinsic in the computerisation of warfare, the RMA generates a movement towards the fulfilment of the second deterrence, the detonation of the information bomb. Lastly, such developments are hypermodern because, in the era of the strategies of deception, cyberwar and orbital space in which the locally positioned atomic bomb has disappeared, it is the information bomb that initiates the politics of the integral accident.

## II. The Significant Contribution of the Original Work to the Advancement of the Field of Study

The research programme embodied by the present submission is principally founded on the writings of Virilio. However, other contemporary contributors to hypermodernism, new cultural theory and technopolitics, such as the Krokers,



are also important. Additionally, the programme utilises Bataille's concept of excess energy as wealth while presupposing a critique of his cosmic vitalism. The political and economic, social, philosophical and architectural approaches of Marx and Bauman, Lingis and Woods are also sources of continuing inspiration. Yet the project diverges from modern and postmodern cultural and social theory through its negative response to the binary opposition between modernism and postmodernism as a reaction to contemporary cultural crises. Its significant contribution, aside from its creative conception of hypermodernism, is the rejection of the prefix post and the acceptance of the prefix hyper or excess. The critical framework of the programme is therefore neither a refutation of the forceful epistemological confidence of modernity nor a dismissal of the dogmatic theoretical pessimism of postmodernity. Rather, it is a novel critical investigation and acknowledgement of double moments of cultural affirmation and negation or the continuation of modernism by other means.

The independent and original contribution to knowledge represented by the published work is the groundbreaking analysis and broadening of hypermodernism to new social theory and technopolitics. It demarcates the rejection of the binary hostility between modernity and postmodernity through an admission of the necessities of hypermodernity. The core thesis, that hypermodernity is established through the prefix hyper and the detection of the economies of excess is, as far as I am aware, an original one.

Following the publication of the list of works on which the application is based, I assembled another (jointly) edited book entitled Living With

Cyberspace: Technology & Society in the 21<sup>st</sup> Century (Armitage and Roberts, 2002a). The underpinnings of this volume required the reassessment of the concept of hypermodernism and the re-examination of a substantial amount of new cultural theory and technopolitics. In developing such underpinnings, and in reassessing my own previous research programme, I became increasingly aware of the binary terms employed by Virilio, particularly in The Information Bomb, and their influence on my conception of hypermodernity. I am of course deeply indebted to Virilio for his conceptualisation of dromology and the political economy of speed, a conceptualisation that is at the heart of my own contribution to knowledge. Nevertheless, I now argue that questions concerning, for example, the civilianization or the militarization of science, cannot be posed in binary terms. For to pose questions in this manner is to privilege one term over another and to ignore or suppress the contemporary integration of, say, hope and despair into the project(ile)s of hypermodern(organ)ization. Thus, far from weakening my previous writings, this criticism of Virilio and my own earlier work paves the way for strengthened analytical strategies based not on binary but on hypermodern terms. As a result, independent critical capacities and the identification of double moments of social authorisation and ambiguity are now appreciated as the continuation of modernity by other means. The search for an understanding of the continuation of modernity by other means is an undertaking I am presently pursuing in research related to the concept of 'chronotopia' (Armitage and Roberts, 2002b).

At the same time, Machinic Modulations has recently received three excellent reviews from Alan Sondheim (2000), Mark Andrejevic (2000) and M. Michael Schiff (2000). Even so, in his review, Schiff criticised the nature and abstract level of the theoretical jargon contained in the articles. Although self-critical of the specialist language adopted by some writers, Machinic Modulations does not provide explanations of the jargon. This is because, prior to its publication, not only did the language of new cultural theory and technopolitics not exist but also neither did many of the questions it raised. Thus, any effort to explain the jargon would have involved closing down the debate over Machinic Modulations before it had begun. Nonetheless, this justification does run the risk of accepting a binary opposition between theory and practice. Hence, in my present research programme, I am concerned to investigate, scrutinise and critique doubled moments of hypermodern cultural and social affirmation and negation or the continuation of theory and practice by other means. Similarly, the Krovers' thesis that binary oppositions are key features of the dominant logic of power and its resistance, a thesis that is only touched upon in the current submission, is a continuing influence on my present work.

Mark Featherstone's (2001) criticism of Paul Virilio: From Modernism to Hypermodernism and Beyond concerns its apparent endorsement of Virilio's idealisation of architecture as freedom. Virilio's architectural modernism belongs to the 'Brutalist' School. Without a critical historical account of 'Brutalism', therefore, the book does tend to overstate the significance of Architecture Principe in the development of the modern movement. This overemphasis is

attended to in a forthcoming chapter influenced by Virilio's Strategy of Deception and issues concerning modern and postmodern war, cyberwar and the orbital space of the integral accident or the continuation of politics by other means. Here, the hypermodern city is contrasted with the 'gray zone' of total mobilization in the Philippines (Armitage, 2001e; Armitage and Roberts, 2002c).

Overall, the research programme is an engagement with the hypermodern argument that new cultural theory and technopolitics signifies a refutation of the binary opposition between modernism and postmodernism. Replying to the postmodern claim that only the prefix post can accurately react to the emergency of contemporary culture, hypermodernism uses instead the prefix hyper or excess. As an alternative to denying the optimism of modernity or the pessimism of postmodernity, the programme argues for the necessity of confronting and accepting double moments of acceleration and reversal. For only then will studies of new social theory and hypermodernity, the economies of excess, dromoeconomics, the project(ile)s of hypermodern(organ)ization, strategies of deception, cyberwar, orbital space and the integral accident be acknowledged as the continuation of modernism, modernity and politics by other means. By means of multidisciplinary research in contemporary philosophy, sociology and politics, the research programme makes plain its comprehension of new methodologies in a number of individual and independent contributions to knowledge on concepts such as excess, culture and technology. In conclusion, it is my conviction that the published work and this

critical appraisal have not only contributed to the advancement of the hypermodern cultural and social field of study but also to the foundations of additional hypotheses on which further hypermodern work can be developed.

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The problem of speed opens our way into the entirety of the contemporary world and offers a key for reading it; the notion of speed is an incomparable analytic instrument for dealing with its political, strategic and social situations...

Paul Virilio<sup>1</sup>

It would be difficult to imagine a more disturbing contemporary philosopher than Paul Virilio, Professor of Architecture at the École Speciale d'Architecture in Paris. Virilio's work is centrally concerned with theorising speed and power, most notably with respect to technology, the body, warfare and culture. Increasingly Virilio has come to focus on the relationship between vision technologies, the politics of speed and questions of aesthetics. Indeed, it would not be an exaggeration to say that Virilio is currently consumed by the connections he sees between speed and the "regimes of the visual"; between media technologies and the dissemination of images; between art history, war and urban planning; between painting, architecture and photography, as well as those between holography, photograms, infographics and the whole conjectural field of study he terms the "logistics of perception."

Virilio is thus crucially engaged in formulating the correlation between vision technologies and the postmodern condition. He is, however, especially interested in how such technologies come to substitute themselves for the human sensorium and in particular the faculty of perception. It is these interests, then, which provide the context for a reading of *The Vision Machine*.<sup>2</sup> Reading Virilio is exhilarating at times, although it is not always easy to decipher the meaning behind his writings. This is because he is not simply concerned with articulating the phenomenon of speed from a philosophical standpoint. Rather, he is seeking through his work to become a *speeding philosopher*. The

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paul virilio's  
the vision machine

implications of this are numerous. For one thing, Virilio has, in effect, created an entire vocabulary all of his own. For another, his writing style is not only arcane but also what at best could be described as dislocated, some might even say incoherent. He produces his ideas in *The Vision Machine* and elsewhere at a dizzying rate. Allied to this, Virilio's own view on the ethical implications of vision technologies in the information age is a dark one.

### speed politics

Virilio's key theoretical innovation is the concept of *dromology* – the science or logic of speed. It is dromology which is at the heart of his writings in such volumes as *Pure War* (written with Sylvère Lotringer, 1983); *Negative Horizon* (1986); *Speed & Politics* (1986); *War and Cinema* (1989); *Popular Defense & Ecological Struggles* (1990); *The*

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*Aesthetics of Disappearance* (1991) and *The Lost Dimension* (1991). *The Vision Machine* is thus a treatise on what I shall call *accelerated aesthetics*.

By invoking the concept of dromology, Virilio is basically involved with exploring the links between speed and power in a world which, according to him, is currently experiencing the disappearance of material space under the impact of what he calls "intensive time." Dromocratic politics, then, is an abstract discipline.<sup>3</sup> It blends ideas taken from sources such as Einstein's relativity theory with others derived from postmodern conceptions of technology and critical theory.

For instance, in *Speed & Politics*, Virilio argues that the human body no longer functions according to biological, but according to technological time. Indeed, for him, the body is *constituted* by various technologies and is thus fully penetrated by speed. It is for this reason that he writes about the body as a "vector of speed," or as a "metabolic vehicle."<sup>4</sup> Thus, whereas once Nietzsche spoke of the "will to power," Virilio speaks instead of the "will to nothingness" and the advent of "bodies without wills" – a condition brought about in part by the invasion of the body by vision and other technologies. However, according to Virilio, the "boarding of metabolic vehicles" by technologies does not take place automatically. Indeed, it is orchestrated by those sections of the polity whose duty it is to determine material and aesthetic value in society – the military and the media. Hence, for Virilio, the human body is now little more than a mechanism designed to carry out the requirements of dromocratic society; a society which is dominated by something close to Nietzsche's conception of "slave morality."<sup>5</sup>

Similarly, Virilio sees the concepts of relativity and time as crucial components of the

postmodern political and cultural condition. As he notes in *Speed & Politics*, "[t]he loss of material space leads to the government of nothing but time. *The Ministry of Time* sketched in each vector will finally be accomplished following the dimensions of the biggest vehicle there is, the *State-Vector*" (141).

Thus, unlike Marx who saw the realm of the political as being centrally focused around questions relating to the accumulation and distribution of the economic surplus, or Foucault who envisaged it as being bound up with new forms of subjectivity and models of existence that do not fully succumb to the dark side of reason, Virilio alludes to its *disappearance into speed*.<sup>6</sup> For Virilio, then, power is accelerated movement in and through time.

The latter point is significant for two reasons. Firstly, it explains why Virilio is so entranced by war. War is literally *power in movement* and therefore the most acute form of speed politics. Secondly, both *Pure War* and *War and Cinema* in particular can be viewed as precursory texts to *The Vision Machine*. For example, it is in *War and Cinema* that we find Virilio's most accomplished work regarding the affinity between war-time and the logistics of perception. For, according to Virilio, dromological bodies are by definition warring bodies. Bodies for which the will to power has been translated initially into the "will to speed" and ultimately into the will to nothingness by the "warrior priests" who control the "war machine"; a machine which increasingly relies on visual technologies to take up arms against time itself. Furthermore, for Virilio, the omnipresence of wars waged increasingly through visual technologies (the Persian Gulf War springs to mind) only serves to highlight the pervasiveness of such technologies in society generally. Ultimately, then,

Virilio is anxious to trace the gradual but continuing disappearance of human subjectivity into technological systems.

### the vision machine

It is important to be clear from the outset that, in *The Vision Machine*, Virilio is not involved in a discussion about traditional aesthetics, that is, about philosophical judgements concerning taste and beauty. Instead, he is concerned to enunciate a kind of accelerated aesthetics founded on the material presence of dromology, war and vision technologies. The key to Virilio's position lies in his assertion that, today, the integration of speed and aesthetics is leading to the creation of new settings for the operation of power: settings which Virilio sees as bleak omens for the future of human subjectivity. This, then, is the ghost in *The Vision Machine*.

Specifically, *The Vision Machine* is an essay on the incorporation of human perspective into imaging apparatus like cinema, television and video. However, for Virilio, it is not how such vision technologies are used which constitutes new sources and sites of power but the nature of the technologies themselves. Virilio's argument here is that, as material space disappears into intensive time, the guardians of dromocratic society – the police, the judicial authorities, the military and the media – become ever more concerned with patrolling the point of view from which individual subjects "see" the world. In particular, Virilio is keen to draw out the implications for the body of the waning of both biological and historical time and space. For, in his view, such ancient and human-centred experiences are being progressively superseded by visual technologies which function in accordance with what he describes as the logic of "speed-space"; a

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space which, in effect, conjures up technologically induced delusions of distance in the human observer.<sup>7</sup> The apparently captivating universe of so-called "virtual reality" is the sort of thing Virilio is trying to come to terms with.<sup>8</sup>

Without a doubt, Virilio's discussions of accelerated aesthetics and power do have a certain panache. Moreover, his focus on dromology allows him to roam freely over previously seeming disparate subjects like technical domination, the death of the subject, alienation, human perspective and the role of vision machines in both war and peacetime. Virilio's philosophy of vision is also soundly based on an historical understanding of the material development of imaging systems. His aesthetic sensibilities are therefore very much alive to the political, not to say authoritarian, meanings inherent in the continuing advancement of such "regimes of the visual."

In essence, Virilio's rage is directed against the domination of monocular perspective, that is, against the pivotal place given to the eye of the human observer in Western rationalist aesthetic and visual systems: systems founded on the construction of cubic spaces regulated and co-ordinated from a single point of view. Now, Virilio is not the first French philosopher to denounce either monocular perspective or its absorption into vision technologies.<sup>9</sup> He is, though, the only one who links such concerns to a discussion of speed politics and the dematerialisation of subjectivity. Indeed, one need look no further than the events of the Persian Gulf War for confirmation of Virilio's theoretical analyses regarding accelerated aesthetics. As he put it in *War and Cinema*, "images have become munitions"; warfare, then, is increasingly conducted at the level of optical representation, across the screens of vision machines. But the key question is, what prompted humanity to dispense



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with its own eyes and come to rely, instead, on mechanical imaging systems? For Virilio, the answer to this question is clear:

The moment they appeared on the scene, the first optical devices ... profoundly altered the contexts in which mental images were topographically stored and retrieved, *the imperative to re-present oneself*, the imaging of the imagination which was such a great help in mathematics according to Descartes and which he considered a veritable part of the body, *veram partem corporis*. Just when we were apparently procuring the means to see further and better the unseen of the universe, we were about to lose what little power we had of imagining it. The telescope, that epitome of the visual prosthesis, projected an image of a world beyond our reach and thus another way of moving about in the world, the *logistics of perception* inaugurating an unknown conveyance of sight that produced a telescoping of near and far, a *phenomenon of acceleration* obliterating our experience of distances and dimensions... (4)

In Virilio's view, then, optical devices not only change the way in which we experience the world visually. They also speed it up and, in the process, destroy our powers of ocular imagination. Moreover, he argues that, in their latest incarnations, such vision technologies encourage us to perceive the world as if it were entirely made up of nothing more than appearances on a screen. Thus public spaces are increasingly turned into gigantic film sets where unattended and stationary video surveillance cameras dissolve individuals into mere images:

This solemn farewell to the man behind the camera, the complete evaporation of visual subjectivity into an ambient technical effect, a sort of permanent pancinema, which, unbeknown to us, turns our most ordinary acts into movie action, into new visual mate-

rial, undaunted, undifferentiated vision-fodder... (47)

Virilio's optical universe is thus characterised by the profusion of ethereal video imagery. Of course, such imagery and the miles of videotape it consumes creates as many "problems" as it "solves" for the administrators of dromocratic society. Indeed, Virilio refers to the problem associated with the construction and visual framing of technologically monitored public spaces as the problem of the "Third Window."<sup>10</sup> Here, Virilio's central argument is that, although the police and various other civil authorities are devoted to creating electronic versions of Bentham and Foucault's panopticon, they seek to do so vicariously; with the aid of new vision, computer and telecommunications surveillance technologies.<sup>11</sup> It is for these reasons, according to Virilio, that we have recently seen the

sudden welter of instantaneous retransmission equipment, in town, in the office, at home: all this real-time TV monitoring tirelessly on the lookout for the unexpected, the impromptu, whatever might suddenly crop up, anywhere, any day, at the bank, the supermarket, the sports ground where the video referee has not long taken over from the referee on the field. (65-66)

However, according to Virilio, there is a huge difference between premodern optical devices like the camera obscura or the telescope and postmodern ones like video security cameras. For, where the former were manipulated by various individuals to contemplate distant objects beyond their reach, the latter are exploited by the state apparatus and other institutions to examine individual subjects. As Virilio, following the artist Paul Klee, chillingly puts it, "*Now objects perceive me*" (59). As he notes, from now on, avenues and public venues will be "eclipsed by the

screen, by electronic displays, in a preview of the 'vision machines' just around the corner. The latter will be capable of seeing and perceiving in our place" (64).

It is not enough, then, to construct a visual record of the movements of dromocratic subjects in *delayed-time*. They must be monitored in *real-time*. Virilio provides an excellent example of this point when he discusses how law courts, particularly in child abuse cases, are increasingly dispensing with the embodied optics of the eye-witness. Instead, they now rely more and more on what he calls the hyper-real "video evidence" of "telepresent" witnesses:

Where the body of the person in custody is still produced before the court (that is, if they agree), they are encircled by electronic microscopes, mass spectrometers and laser videographs in an implacable electronic circuit. Now that the court arena has become first a movie-projection room, then a video chamber, legal representatives of all stripes have lost any hope of creating within it, with the means at their disposal, a *reality-effect* capable of captivating the jury and audience for whom video-recorders, networking systems like Minitel, television and sundry computers have become a virtually exclusive way of gathering information, communicating and understanding reality and moving about in it. (44)

There are a number of other features which Virilio identifies with the introduction of vision machines. For instance, he suggests that there is a deep-rooted correspondence between speed-space, the evolution of visual technologies, and the dissolution of communal relationships in societies with dromocratic tendencies. Moreover, Virilio is insistent that not only is human subjectivity being commandeered by vision machines, so also is the optic nerve itself:

Today, the strategic value of speed's "no-place" has definitely outstripped the value of place. With the instantaneous ubiquity of teletopology, the immediate face-to-face of all refractory surfaces, the bringing into visual contact all localities, the long wandering of the gaze is at an end ... The delineation between past, present, and the future, between here and there, is now meaningless except as a visual illusion. (31)

A second and related feature is Virilio's discussion concerning the effects of "automated perception," or what he calls the "*industrialisation of vision*" (59), on the observer's identity. He remarks on how current visual technologies like virtual reality systems tend to invade the body but leave the observer with little to do but gape at the technical fireworks on display. For instance, he writes about how "[t]he young American film-maker Laurie Anderson, among others, is able to declare herself a *mere voyeur interested only in details*; as for the rest, she says, '*I use computers that are tragically unable to forget, like endless rubbish dumps*'" (8).

For Virilio, therefore, the vision machine is an autonomous technological system. It is also one which has dire consequences for human subjectivity. For, as he says at one point:

On the other side of the camera ... all this visual gadgetry only amounts to telesurveillance for Nastassja Kinski, spying on her every transformation as an actress, second by second: "I sometimes wonder if films are not more of a poison than a tonic, in the end. If these little flashes of light in the night are really worth all the pain. When I cannot get that moment of truth where you feel yourself opening up like a flower, I absolutely loathe the bloody camera. I can just feel this black hole eyeing me, sucking me in, and I feel like smashing it to smithereens." (52)

## accelerated aesthetics

Virilio understands the logic of *The Vision Machine*, of accelerated aesthetics, as the unremitting dialectic of disappearance and dematerialisation. In the postmodern era, the era of videography, holography and infographics, the virtual image both dominates and dissipates all former optical realities: "In two hundred years the philosophical and scientific debate ... has shifted from the question of the *objectivity* of mental images to the question of their *reality*" (60). And yet the vision machine continues on, endlessly producing, distributing and even consuming its own images; a sighting device, therefore, capable of evoking any number of intangible representations and techno-fantasies. Virilio's writings concerning vision technologies are persuasive in the end because of the emphasis he places on how such technologies not only imperceptibly sever their connections to society itself, but how, in doing so, they manage to introduce an advanced form of accelerated aesthetics founded on a new "logistics of the image":

The age of the image's *formal logic* was the age of painting, engraving and etching, architecture; it ended with the eighteenth century. The age of *dialectic logic* is the age of photography and film or, if you like, the frame of the nineteenth century. The age of *paradoxical logic* begins with the invention of video recording, holography and computer graphics ... as though, at the close of the twentieth century, the end of modernity were itself marked by the end of a logic of public representation. (63)

According to Virilio, the key problem for those of us left stranded at the junction between modernity and postmodernity is that:

although we may be comfortable with the *reality* of the formal logic of traditional pictorial representation and, to a lesser degree,

the *actuality* of the dialectical logic governing photographic and cinematic representation, we still cannot seem to get a grip on the *virtualities* of the paradoxical logic of the videogram, the hologram or digital imagery ... This probably explains the frantic "interpretosis" that still surrounds these technologies today in the press, as well as the proliferation and instant obsolescence of different computer and audiovisual equipment. (63)

## rage against the machine?

What, then, of Virilio's frantic interpretosis in *The Vision Machine*? Clearly, he has found in speed politics, and particularly in the concept of dromology, a rich and rewarding terrain of study. In addition, his theoretical approach to the analysis of perception and visual technologies has brought forth a postmodern logistics of the image, complete with freshly minted concepts like "paradoxical logic."

Nonetheless, and despite Virilio's evident technological negativism, he still remains an unenthusiastic doom-merchant on the subject of automated optical devices. The chief reason for this stems in large part from his rather nebulous place in contemporary French philosophy. On the one hand, one cannot help but hear the forbidding voice of the late Jacques Ellul echoing through the pages of *The Vision Machine*.<sup>12</sup> On the other, there are Virilio's latent connections to France's growing number of "New Philosophers" like Bernard-Henri Lévy and Maurice Clavel. For, in the latter half of the 1970s, these writers abandoned their former allegiances to the Marxian tradition and in its place they substituted a political and philosophical position derived in roughly equal parts from Christianity and Nietzsche.<sup>13</sup> One of the results of this shift of position was that, when Ellul, Lévy, Clavel or Virilio later

found themselves facing the dilemmas associated with secular visual technologies and the imminent death of the subject, they turned to their Christian faith and the potency of the divine conception for guidance. Virilio's *The Vision Machine* can thus be seen as a melancholy meditation on the public's loss of belief in its own powers of perception:

In the West, the death of God and the death of art are indissociable; the zero degree of representation merely fulfilled the prophecy voiced a thousand years earlier by Nicephorus, Patriarch of Constantinople, during the quarrel with the iconoclasts: If we remove the image, not only Christ but the whole universe disappears. (16-17)

It is, however, important to appreciate that Virilio's later works are essentially exploratory in nature. Indeed, he is intent on projecting his theories about the dispersal of social existence and human subjectivity into visual technologies towards one possible future, albeit one which conforms to the generalised logic of synthetic perception. Virilio's writings also fasten on the widespread *ambivalence* that currently surrounds the development of visual technologies like virtual reality systems. He thus taps into one of the key themes presently being pursued by postmodern theorists and those of us who are expressly concerned with the links between vision, technology and culture.<sup>14</sup>

There are, though, a number of difficulties with *The Vision Machine*. For, although the book is a very able survey of visual technologies and their relation to perception and social existence in general, there is almost nothing in the text which relates to any established theoretical framework concerning these issues. For instance, Virilio darts within the space of a single paragraph from Aldous Huxley to Pascal, from Norman

Spear to Edgar Allan Poe and from Deleuze to Céline. Furthermore, there is nothing so vulgar in Virilio's work as primary evidence, or even much in the way of secondary or supportive research, to back his claims. In addition, and like many other recent French philosophical tracts, Virilio's critique in *The Vision Machine* is completely divorced from any reference to the dynamics of capitalist production or class conflict. It would also be fair to say that the book is steeped in technological determinism. Because vision machines are technically attainable does not mean that they will be either profitable or practically achievable. Curiously, Virilio also seems unaware of what might be described as compound technologies like video games, which incorporate keyboards, sound and vision. Nor does he appear to be acquainted with feminist-inspired accounts of technology and subjectivity like those provided by Donna Haraway.<sup>15</sup> Similarly, Virilio's emphasis on the disappearance of material space and its replacement by speed-space's "no-place" looks, at best, premature. It would be difficult to better David Harvey's recent remarks on this issue in his book, *The Condition of Postmodernity*.<sup>16</sup> He writes:

the collapse of spatial barriers does not mean that the significance of space is decreasing. Not for the first time in capitalism's history, we find the evidence pointing to the converse thesis. Heightened competition under conditions of crisis has coerced capitalists into paying much attention to relative locational advantages, precisely because diminishing spatial barriers give capitalists the power to exploit minute spatial differentiations to good effect. Small differences in what the space contains in the way of labour supplies, resources, infrastructures, and the like become of increased significance. Superior command over space becomes an even more important weapon in class struggle. (293-4)

## accelerated aesthetics

The key philosophical problem with Virilio's position, however, is not his emphasis on speed-space. It is his insistence that, somehow, his Christian-influenced theoretical insights into the disappearance of human subjectivity are, *in and of themselves*, a reasonable basis not only for a moral evaluation of visual technologies but also for genuine political protest. Indeed, in order to mount such an argument, he is forced to return not to modernity, but to *premodernity*. For, in the end, Virilio still places his Catholic faith – literally in this case – in the assumed existence and hoped-for survival of the moral human subject; that mythical self-determining agent who instinctively knows the difference between right and wrong. There is, then, a clear theoretical difference between a writer like Virilio and, say, Baudrillard, who embraces the visual and technological imaginary. Baudrillard is content to examine the seductive power of technology whilst also remaining critically distant from it;<sup>17</sup> a position shared with numerous others like Laurie Anderson, the American performance artist quoted by Virilio, or the US "surveillance artist" Julia Scher.<sup>18</sup> Both these artists, like Baudrillard himself, are as much mesmerised as they are terrified by the prospect of technologically induced human absences.

In the final analysis, Virilio is significant because he is the only contemporary radical philosopher of speed. *The Vision Machine*, despite its failed attempts at replacing political opposition with religious non-conformity, is still a book worthy of deep contemplation. The central problem is that Virilio advocates essentially premodern solutions to the decidedly postmodern problems surrounding visual technologies and the future of human subjectivity. Virilio is in the end, therefore, unable to acknowledge that the arrival of vision machines could signal, *at one and the same time*, both the domination of human

subjectivity by optical devices and its liberation from all bodily, and even earthly, constraints. The confused and contradictory world of accelerated aesthetics, then, still awaits a satisfactory ethical response.



## notes

I would like to thank Joanne Roberts for her critical and editorial support during the writing of this article.

1 Paul Virilio, "Paul Virilio: An Interview with Jerome Sans," *Art and Philosophy*, ed. G. Poloti (Milan: Flash Art Books, 1991) 139.

2 Paul Virilio, *The Vision Machine* (Bloomington, Indianapolis and London: Indiana University Press and British Film Institute, 1994). Page references in the text refer to this edition. All emphases in quotations are in original.

3 Indeed, even an abstract writer like Baudrillard has commented on this aspect of Virilio's work. See, for example, S. Mele and M. Titmarsh, "Games with Vestiges," *Baudrillard Live: Selected Interviews*, ed. Mike Gane (London: Routledge, 1993). Baudrillard says:

I find Virilio excellent ... At one and the same time he has simplified and radicalized the analysis of speed. I find all of that very, very strong. And in some sense it's more extreme, more extremist than my own analysis of the problem of speed and so on. But he is perhaps a little bit abstract. (91)

4 Shortage of space does not allow me to elaborate on Virilio's use of the concept of *vector*. Suffice it to say that he has consistently deployed this concept in his discussions of the technological and aesthetic aspects of perception. Strictly speaking, the notion of a vector derives from mathematics. According to the *Collins English Dictionary*, a vector is "a variable quantity, such as force, that has magnitude and direction and can be resolved into components that

are odd functions of the co-ordinates." Virilio uses the concept to mean the course along which visual information and therefore visual power travels. There is also a connection between Virilio's use of the concept of vector and that of the concept of "line of flight" employed by Gilles Deleuze and Félix Guattari; a connection which is explicitly acknowledged by them in Chapter 12, "Treatise on Nomadology – The War Machine," in their *A Thousand Plateaus: Capitalism & Schizophrenia* (London: The Athlone Press, 1988).

5 The most obvious reference here is F. Nietzsche, *On the Genealogy of Morals* (New York: Vintage Books, 1967). Virilio discusses his ideas concerning the will to nothingness and bodies without wills in "Dromocratic Society," Part Three of *Speed & Politics*, and in the essay, "The Last Vehicle" in *Looking Back on the End of the World*, eds. D. Kamper and C. Wulf (New York: Semiotext(e), Autonomedia, 1989) 106-119.

6 On Foucault, see, A. Thacker, "Foucault's Aesthetics of Existence," *Radical Philosophy* 63 (spring 1993) 13-21.

7 On this point, see C. Dercon, "Speed-Space: An Interview with Paul Virilio," *Impulse* 12.4 (1986) 35-39.

8 Virilio has recently developed his interest in virtual reality systems, television, simulation and cyberspace. See, for example, Louise Wilson, "Cyberwar, God and Television: An Interview with Paul Virilio," in the electronic journal, *CTHEORY: Theory and Politics at the Dawn of Recombinant History* 17.3 (1994). Text not paginated or numbered. In addition, see Paul Virilio, "Speed and Information: Cyberspace Alarm!" in the current (autumn 1995) issue of *CTHEORY* (*CTHEORY* can be found on the Internet @ <http://www.freedonia.com/ctheory/>).

9 An anti-visual stance has been a strong current of French post-structuralist and postmodern philosophy for some time now. There are also several excellent recent studies dealing with this and related issues. See, for example, Martin Jay's *Force Fields*

(New York and London: Routledge, 1993); or his *Downcast Eyes: The Denigration of Vision in Twentieth-Century French Thought* (Berkeley: University of California Press, 1993). Other useful references are D.M. Levin, *Modernity and the Hegemony of Vision* (Berkeley: University of California Press, 1993); R. Krauss, *The Optical Unconscious* (Cambridge, MA: MIT Press, 1993) and Jonathan Crary's *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Cambridge, MA: MIT Press, 1990). Jean-Louis Comolli's essay, "Machines of the Visible" is also an early example of this sort of thinking within the arena of film and television studies. It can be found in *The Cinematic Apparatus*, eds. T. de Lauretis and S. Heath (Basingstoke: Macmillan, 1980). See, also, Jean-Jacques Lecercle, "Berkeley: Bishop or Busby? Deleuze on Cinema," *Thinking Art: Beyond Traditional Aesthetics*, eds. A. Benjamin and P. Osborne (London: ICA, 1991). Virilio's own thoughts on contemporary developments regarding the cinematic apparatus are well represented in his essays, "Cataract Surgery: Cinema in the Year 2000," *Alien Zone: Cultural Theory and Contemporary Science Fiction Cinema*, ed. A. Kuhn (London: Verso, 1990), and "Aliens," *Incorporations*, eds. J. Crary and S. Kwinter (New York: Zone Books, 1992) 446-449.

10 Virilio talks in detail about the Third Window in the interview with Dercon (see note 7 above).

11 Virilio acknowledges his obvious debts to the writings of Foucault on surveillance and panopticism at a number of points in *The Vision Machine*. The most glaring references here are to M. Foucault, *Discipline and Punish: The Birth of the Prison* (Harmondsworth: Penguin, 1977). In addition, see "Prison Talk: An Interview with Michel Foucault," *Radical Philosophy* 16 (spring 1977) 10-13. See, also, M. Foucault, "The eye of power," *Semiotext(e)* 3.2 (1978) 6-19. For a recent and lucid discussion of many of these issues see D. Lyon, *The Electronic Eye: The Rise of Surveillance Society* (Oxford: Polity Press, 1994).

12 See, for instance, J. Ellul *The Technological Society* (London: Jonathan Cape, 1965).

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13 On the origins, trials and tribulations of the "New Philosophers" see P. Dews, "The 'New Philosophers' and the End of Leftism," *Radical Philosophy* 24 (summer 1980). This essay is also reprinted in *Radical Philosophy Reader*, eds. R. Edgley and R. Osborne (London: Verso, 1985) 361-384. There are, of course, numerous other "alternative" accounts of the development of post-1945 French intellectuals. See, for instance, *Arguing the Revolution: The Intellectual Left in Postwar France*, by S. Khilnani (New Haven and London: Yale University Press, 1993). A useful article questioning Khilnani's arguments from a radical perspective can be found in Gregory Elliot's review essay, "Contentious Commitments: French Intellectuals and Politics," *New Left Review* 206 (July/August 1994) 110-124.

14 A leading exponent of this theme is of course the great Polish sociologist Zygmunt Bauman. His *Modernity and Ambivalence* (Cambridge: Polity Press, 1991) is a key reference for anyone attempting to chart this region of theory. In addition, see, for example, K. Robins, "Into the Image: Visual Technologies and Vision Cultures" in *Photovideo: Photography in the Age of the Computer*, ed. P. Wombell (London: Rivers Oram Press, 1991) 52-77.

15 Since *The Vision Machine* was originally published in France in 1988, it is not unreasonable to expect Virilio to be familiar with, say, Donna Haraway's influential essay, "A Manifesto for Cyborgs: Science, Technology and Socialist Feminism in the 1980s," *Socialist Review*, vol. 15 (1985). A revised version of this essay is to be found in her later work, *Simians, Cyborgs and Women: The Reinvention of Nature* (New York: Routledge, 1991).

16 D. Harvey, *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change* (Oxford: Basil Blackwell, 1989). Harvey criticises Virilio specifically on pages 351-2.

17 See, for example, J. Baudrillard, *Seduction* (London and New York: Macmillan and St Martin's Press, 1990). Or, for another typically flamboyant example, see Baudrillard's "The end of production" in his *Revenge of the Crystal: Selected Writings on the*

*Modern Object and its Destiny* (London: Pluto Press, 1990) 99-128.

18 See Constance Penley's "Something to Watch Over You: The Surveillance Art of Julia Scher" in *Mondo 2000*, vol. 9 (1993) 34-9. Thanks to Andrew Hindley for drawing this article to my attention. In her latest book, *Stories from the Nerve Bible* (New York: Harper Perennial, 1994), Laurie Anderson says:

People blame technology for a lot of things. They say for example that technology makes it harder to communicate, harder to have a real conversation. But I think it was probably hard to have a real conversation 100 years ago, it was hard 500 years ago, 5000 years ago ... And anyway, technology doesn't necessarily alienate people. Sometimes technology makes it possible to be intimate... (62)

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To:

## Resisting the Neoliberal Discourse of Technology

### The Politics of Cyberculture in the Age of the Virtual Class

*John Armitage*

Totalitarianism is latent in technology. It was not merely Hitler or Mussolini who were totalitarian, or the Pharaohs as far as I am concerned. Totalitarianism is already present in the technical object.

- Paul Virilio <sup>1</sup>

**Such penetrating assessments** of technology are increasingly exceptional: nearly all the political, economic, and cultural texts that surround us suggest that we are entering a truly new technological and democratic age. Indeed, modern day pharaohs, such as Microsoft's Bill Gates constantly assert that the world is on the brink of a "technological revolution". <sup>2</sup> Meanwhile, neoliberal politicians, like American Vice President Al Gore, see the "Global Information Infrastructure" as nothing less than the basis of a new Athenian age of electronic democracy. <sup>3</sup>

### The Neoliberal Discourse of Technology

**Contemporary neoliberalism** is the pan-capitalist theory and practice of explicitly technologized, or "telematic", societies. <sup>4</sup> Neoliberalism is of course a political philosophy which originated in the advanced countries in the 1980s. It is associated with the idea of "liberal fascism": free enterprise, economic globalization and national corporatism as the institutional and ideological grounds for the civil disciplining of subaltern individuals, "aliens" and groups. However, while pan-capitalism appears largely impregnable to various oppositional political forces and survives broadly uncontested, it nonetheless relies extensively on a specifically neoliberal discourse of technology. What is more, this discourse is principally concerned with legitimating the political and cultural control of individuals, groups, and new social movements through the material

and ideological production, promotion, distribution, and consumption of self-styled "virtual" technologies like virtual reality (VR) and cyberspace.

**These contentions about** pan-capitalism, telematics, and the neoliberal discourse of virtual technologies derive from the fact that human labour is no longer central to market-driven conceptions of business and political activities. Actually, as far as some neoliberals are concerned, *technology is now the only factor of production*.<sup>5</sup> Artefacts like VR, cyberspace, and the Internet thus embody not "use value" but what Arthur Kroker and Michael Weinstein term "abuse value":

The primary category of the political economy of virtual reality is abuse value. Things are valued for the injury that can be done to them or that they can do. Abuse value is the certain outcome of the politics of suicidal nihilism. The transformation, that is, of the weak and the powerless into objects with one last value: to provide pleasure to the privileged beneficiaries of the will to purity in their sacrificial bleeding, sometimes actual (Branch Davidians) and sometimes specular (Bosnia).<sup>6</sup>

**The neoliberal analysis** of production under the conditions of pan-capitalism and telemetry accordingly focuses not on the outmoded Marxian conception of the "labor process", but on the technological and scientific *processing of labour*.<sup>7</sup> The result is that surplus labor is transformed by relentless technological activity, and the means of virtual production produce abuse value.

## Technology and the Politics of Cyberculture

**The technological fixations** of the neoliberals are, of course, presently extending themselves from virtual production to virtual culture; to technoscience and to cyberculture, including the culture of cyborgs, cyberfeminism, cyberspace, cyberwarfare, and cyberart.<sup>8</sup> Nietzsche emphasizes, in *The Wanderer and His Shadow*, that technologies and machines are "...premises whose thousand year conclusion no one has yet dared to draw."<sup>9</sup> Yet, in scarcely over one hundred years, it has become clear that technology is not only voraciously consuming what is left of "nature," but is also busily constructing it anew. Nanotechnology, for example, brings together the basic atomic building blocks of nature effortlessly, cheaply, and in just about any molecular arrangement we ask.<sup>10</sup> Information and communications technologies evoke the virtual architecture and circuitry of fiber-optics, computer networks, cybernetic systems, and so on.

**These technologies, these** assemblages, though, need to be appreciated for what they are: synthetic materials transformed into instruments of "the will to virtuality," or of human incorporation - even "disappearance" - into cybernetic machinery. Cybercultural technologies are agents of physical colonization, imperialists of the human sensorium, created, like Frankenstein, by our own raw desire. They represent what Virilio calls "the third revolution", the impending bodily

internalization of science and technology. As Virilio recently defined the third revolution:

By this term I mean that technology is becoming something physically assimilable, it is a kind of nourishment for the human race, through dynamic inserts, implants and so on. Here, I am not talking about implants such as silicon breasts, but dynamic implants like additional memory storage. What we see here is that science and technology aim for miniaturisation in order to invade the human body.<sup>11</sup>

**As a result**, the division between living bodies and technology is increasingly difficult to maintain; both are now so hopelessly entwined in the "cyborgian" sociotechnical imagination.<sup>12</sup> We are well on our way to "becoming machinic". As Deleuze and Guattari comment: "This is not animism, any more than it is mechanism; rather it is universal machinism: a plane of consistency occupied by an immense abstract machine comprising an infinite number of assemblages."<sup>13</sup>

**Nevertheless, the technologically** determinist assemblages of sundry neoliberal computer mystics, like Jaron Lanier and John Perry Barlow, are questionable because cybercultural technologies, like all technologies, are *innately political*. Technologies like VR do not appear - like rainfall - as heavenly gifts. They have to be willed into existence, they have to be produced by real human beings. Information and communications technologies, for instance, both contain and signify the cultural and political values of particular human societies. Accordingly, these technologies are always expressions of socioeconomic, geographical, and political interests, partialities, alignments and commitments. In brief, the will to technical knowledge is the will to technical power.

**It is crucial**, then, to redefine, and to develop a fully conscious and wholly *critical* account of the neoliberal discourse of technology at work in the realm of cyberculture; one that exposes not only the economic and social interests embodied within cultural technologies, but also their underlying authoritarianism. Maybe Marshall McLuhan was right? The medium *is* the message. The question is, what does it say? Moreover, how does it manage to say it so eloquently, so perfectly, that some among us are more than "willing" to trade corporeality for virtuality? And all for what? A chance to dance to the (pre-programmed) rhythms of technologized bodies? Indeed, it is hard to disagree with Hakim Bey when he writes:

Physical separateness can never be overcome by electronics, but only by "conviviality", by "living together" in the most literal physical sense. The physically divided are also the conquered and the Controlled. "True desires" - erotic, gustatory, olfactory, musical, aesthetic, psychic, & spiritual - are best attained in a context of freedom of self and other in physical proximity & mutual aid. Everything else is at best a sort of representation.<sup>14</sup>

## Technology and the Virtual Class

**What are the** central political dynamics at work in the neoliberal discourse of technology? Today, the development of this discourse is also the development of the shifting determinations of the virtual class. For it is this, "...social strata in contemporary pan-capitalism that have material and ideological interest in speeding up and intensifying the process of virtualization and heightening the will to virtuality." <sup>15</sup>

**Resisting the unconstrained** development of the neoliberal discourse of technology is vital because such resistance impedes the contemporary development of the virtual class. To some of its members, like Douglas Coupland, the reigning technological discourse constitutes the narcissistic flowering of long-held personal ambitions, while to others, like *Wired's* neoliberal evangelist Nicholas Negroponte, it represents the beginning of a new techno-religion. To Alvin & Heidi Toffler, the neoliberal discourse heralds the emergence of a whole new civilization while to Bill Gates and Kevin Kelly it means material wealth and political influence beyond measure. <sup>16</sup>

**Certainly, it is** possible to characterise the present period of self-consciously "spectacular" technological innovation as being driven primarily by pan-capitalism's need to arm itself against the onset of virtual class warfare. <sup>17</sup> Without doubt, the virtual class must, at some stage - and probably with the acquiescence, if not the full participation of global technocratic, political and military elites - confront living labour, actual communities, tangible spaces, material environments, and physical, breathing, bodies. The neoliberal discourse of technology therefore represents an attempt by the virtual class to open up a new period in the cybernetic carnival that is pan-capitalism. The unfolding of the neoliberal discourse of technology is thus the unfolding of virtual class relations. This is the true nature of social communications in the contemporary era.

**For these reasons** it is essential to advance unorthodox, bottom-up, explanations of the evolution of the neoliberal discourse of technology. The chief aim ought to be the equipping of the digitally dispossessed with counter arguments and active political strategies that will work against what the late Christopher Lasch might have called "the revolt of the (virtual) elites and the betrayal of (electronic) democracy." <sup>18</sup>

**Make no mistake,** VR and cyberspace have not simply opened up new wealth generating possibilities for the virtual elites. They have also opened up new political prospects for those who wish to see the spectacular representational systems of crash culture disappear. What is important in the interim, then, is to challenge the pronouncements of the virtual class wherever they appear and join with others in a comprehensive and detailed critique of the neoliberal discourse of technology in a variety of fields ranging from VR to cyberwarfare and beyond. <sup>19</sup> Further, such challenges need to involve a multiplicity of individuals and groups. These might range from school kids and

students disenchanted with the increasing replacement of education by mere technocratic information, to disaffected computer industry workers, or simply local communities seeking control over their own technological environments.

**Virtual politics, therefore,** should be founded on defying the neoliberal discourse of technology currently being fashioned by the virtual class. It is crucial to ensure that the political genealogy of technology, of virtual reality, of the reality of virtuality, is uncovered by numerous individuals, groups, classes, and new social movements. Indeed, without such excavations, the increasingly institutionalised neoliberal discourse of technology currently being promoted by the virtual class will rapidly become a source of immense social power. This is why concrete, corporeal, and ideological struggles over the nature and meaning of technology are so important in the realm of virtual politics. It is also why the specifically neoliberal discourse of the virtual class needs to be countered.

**The pan-capitalist revolution** and the development from industrial to virtual production have generated the neoliberal discourse of technology. It provides the virtual class with an ideological rationale for the ever increasing manufacture of virtual distractions (e.g., movies, VR, and interactive video games). Consequently, many human activities are no longer simply mediated through technology. Indeed, they are so utterly "possessed" by technology that the distinction between virtual activities and actual activities borders on the incomprehensible.<sup>20</sup> The ambitions of the neoliberal discourse of technology are not only unremitting but also potentially infinite.

**Totalitarianism is latent** in technology. It is not simply the virtual class that is totalitarian. Totalitarianism is always present in technology itself.

**Virilio's acute observations** on technology are therefore essentially correct: his theoretical analysis indicates that while we are indeed in the midst of some kind of technological transition, it is improbable that such a transition will usher in a new era of digital democracy.<sup>21</sup> On this view, then, humanity is not on the verge of the kind of technological and democratic revolution envisaged by the neoliberals.

**What separates a critical** interpretation of technology from that of global technological entrepreneurs and leading politicians is a determination to forge a radical understanding of technology's consequences. The advantage of this kind of analysis is that it focuses on key aspects of technology that are rarely, if ever, voiced by computer manufacturers and political pundits. Indeed, the general absence of a critical understanding of technology is one of the chief reasons why so many people seem to be so baffled by the "mysteries" of technology.

**Thus, it is** vital to resist both the neoliberal discourse of technology and the contemporary development of pan-capitalism. In the specific context of the political debates over the discourse of cyberculture, then, it is important to question the uncritical and antidemocratic conception of technology presently being elaborated and disseminated by the virtual

class in its quest for actual wealth and power.

**While technology is** obviously an extremely important and determining force, it is crucial to remember that it is not the only force or agent of change. The virtual class is not simply an assortment of technological and visual representations. In fact, it is all too real. It is the class that at this moment is rewriting the history of virtual and other technologies while simultaneously controlling their organized production, distribution and consumption.

**As a result** of it's monopolistic control of technology, the virtual class is presently being courted by the newly ascendant virtual political class (of which Newt Gingrich in the US and Tony Blair in the UK are examples). This class opposes all those who resist the neoliberal discourse of technology in whatever form it takes (e.g., anti-road building and animal rights protests by young people). It is time, then, to radically rethink, redefine and reinterpret the very meaning of technology, politics, and cyberculture in the age of the virtual class.

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### Notes

1. Paul Virilio and Carlos Oliveira. "The Silence of the Lambs: Paul Virilio in Conversation". In *CTHEORY*. Vol 19. No 1-2. 1996. p.3.
2. Bill Gates. *The Road Ahead*. , New York: Viking Press, 1995.
3. See, for example, Al Gore. "Forging a New Athenian Age of Democracy". In *Intermedia*. Vol 22. 1994. p.14-16.
4. Much of my argument in the following pages draws on Arthur Kroker and Michael Weinstein's *Data Trash: The Theory of the Virtual Class*. , Montreal: New World Perspectives, 1994, and New York: St. Martin's Press, 1994.
5. See, for instance, Jeremy Rifkin. *The End of Work: The Decline of the Global Labor Force and the Dawn of the Post-Market Era*. New York: G. P. Putnam's Sons, 1995; Kevin Kelly. *New Rules for the New Economy: 10 Ways the Network Economy is Changing Everything*. London: Fourth Estate, 1998.
6. Kroker and Weinstein. *Data Trash*. p.64.
7. See, for example, William Di Fazio. "Technoscience and the labor process". In *Technoscience and Cyberculture*. Edited by Stanley Aronowitz, Barbara Martinson and Michael Menser. London: Routledge, 1996. p.195-204.
8. On the phenomenon of cyberculture and cyborgs see, for example, Stanley Aronowitz, Barbara Martinson and Michael Menser. Eds. *Technoscience and Cyberculture*. London: Routledge, 1996; Chris Hables Gray. Ed. *The Cyborg Handbook*. London: Routledge, 1995.
9. Friedrich Nietzsche. *The Wanderer and His Shadow*. New York:

Gordon Press, 1974. p.176.

10. The most obvious reference here is, Eric Drexler. *Engines of Creation*. New York: Anchor, 1986.

11. Paul Virilio and John Armitage. "From Modernism to Hypermodernism and Beyond: An Interview with Paul Virilio". Translated by Patrice Riemens. Forthcoming in *Paul Virilio*, a Special Issue of *Theory Culture & Society* on the Work of Paul Virilio. Vol 16. 1999.

12. See, Donna Haraway. "A Cyborg Manifesto: Science, Technology and Socialist-feminism in the Late Twentieth Century". In her *Simians, Cyborgs and Women: The Reinvention of Nature*. London: Free Associations Books, 1991. p.149-181.

13. Gilles Deleuze and Felix Guattari. *A Thousand Plateaus*. Minneapolis: University of Minnesota Press, 1987. p.256.

14. Hakim Bey. "The Lemonade Ocean & Modern Times: A Position Paper by Hakim Bey". (<http://www.tO.or.at/hakimbey/hakimbey.htm>, Internet, 1991). p.3.

15. Kroker and Weinstein. *Data Trash*. p.163.

16. See, for instance, Douglas Coupland. *Microserfs*. Northampton: Harper Collins, 1995; Nicholas Negroponte. *Being Digital*. New York: Knof, 1995; Alvin Toffler and Heidi Toffler. *Creating A New Civilization: The Politics of the Third Wave*. New York: Turner Publishing, 1995; Bill Gates. *The Road Ahead*. New York: Viking Press, 1995; Kevin Kelly. *Out of Control: The New Biology of Machines*. London: Fourth Estate, 1994, and Kelly's *New Rules for the New Economy: 10 Ways the Network Economy is Changing Everything*. London: Fourth Estate, 1998.

17. Guy Debord. *Society of the Spectacle*. Detroit: Black and Red, 1983.

18. Christopher Lasch. *The Revolt of the Elites and the Betrayal of Democracy*. New York: W.W. Norton & Company, 1995.

19. See, for example, Chris Chesher. "Colonizing Virtual Reality. Construction of the Discourse of Virtual Reality, 1984-1992". In *Cultronix*. Vol 1. No 1. 1994; Manuel De Landa. *War in the Age of Intelligent Machines*. New York: Zone Books, 1991; Paul Virilio. *War and Cinema: The Logistics of Perception*. London: Verso, 1989.

20. This argument can be found in Arthur Kroker. *The Possessed Individual: Technology and Postmodernity*. Basingstoke and London: Macmillan, 1992.

21. Paul Virilio. "The Third Interval: A Critical Transition". In Verena Andermatt Conley. Ed. *Rethinking Technologies*. Minneapolis:



University of Minnesota Press, 1993. p.3-12; Paul Virilio. *The Art of the Motor*. Minneapolis: University of Minnesota Press, 1993.

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John Armitage lectures in politics and media studies at the University of Northumbria at Newcastle, UK. He is currently editing *Paul Virilio*, a special issue of the journal *Theory Culture & Society*, and working on *Virilio Live: Selected Interviews*.

John Armitage (1999), 'Editorial Introduction: Machinic Modulations: new cultural theory & technopolitics', in Angelaki, volume 4, number 2, Special Issue on: Machinic Modulations: New Cultural Theory & Technopolitics, guest edited by John Armitage, pp 1-16; ISBN: 0-902879-26-X; ISSN: 0969 725X.

One can of course see how each kind of society corresponds to a particular kind of machine – with simple mechanical machines corresponding to sovereign societies, thermodynamic machines to disciplinary societies, cybernetic machines and computers to control societies. But the machines don't explain anything, you have to analyze the collective arrangements of which the machines are just one component.

*Gilles Deleuze*<sup>1</sup>

**T**he driving force behind this special issue of *Angelaki* is the rising interest in the theoretical humanities and the social sciences in new cultural and theoretical debates over technology and politics. This theme is associated with the growing significance of a number of related questions concerning the role of technology in new cultural and political theory. To what extent are simple mechanical and thermodynamic machines giving way to cybernetic machines and computers? Are modern and postmodern cultural theories yielding to new "hypermodern" and "recombinant" cultural theories of technology? What is the connection between these new cultural theories and the emergence of "technopolitics"? Can these theoretical developments help to explain the importance of technology in new cultural and political practices? Unfortunately, as Deleuze indicates above, the machines refuse to explain themselves. Consequently, it is left to new cultural and political theorists to explain and debate not simply cybernetic machines and computers but the collective arrangements of which they are just one – often contentious – component. It is, then, these technological and technopolitical questions that lie at the cybernetic and controversial core of *Machinic Modulations: New Cultural Theory & Technopolitics*.

### technology & new cultural theory

Current theoretical interest in technology has been inflected by a variety of modern and postmodern cultural conventions. A number of key modern theorists of technology working within the broad tradition of nineteenth-century Continental philosophy – represented by such thinkers as Marx and Nietzsche – have been of especial significance. Modern cultural theoretical writings have ques-

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tioned technology through a critical examination of its foundations: that is, through the cultural and methodological debate with positivists over what many modern cultural theorists regard as the former's inadequate efforts to account for complex technological meanings in terms of simple technological "facts." If this modern cultural tradition has, on the one hand, been refined through an adversarial contest with positivism, it has, on the other, been developed in the twentieth century through a general commitment to phenomenology, psychoanalysis, existentialism, critical theory, poststructuralism, feminism, and postmodernism. Modern and postmodern cultural theoretical approaches to technology are therefore driven less by questions of fact and more by questions of technology and experience, technology and ontology, technology and rationalisation, technology and deconstruction, technology and sexual difference, and, crucially, of technology and the cultural politics of postmodernism and postmodernity. Here, some of the leading Continental theorists of technology invoked by modern and postmodern cultural theorists – such as

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Debord, Derrida, Benjamin, and Baudrillard – have been of particular importance. For modern and postmodern cultural thinkers all gravitate toward aesthetic, experiential, moral, practical, and political questions concerning the essence, interpretation, actuality, rhythm, and riddle of technology.

Thus, despite the seemingly oblique and somewhat otherworldly modes of address adopted by writers such as Derrida, technological discussions within modern and postmodern cultural theory almost always spring from the actual cultural minefield in which we attempt to find not only ourselves but also the answers to our current questions and, decisively, *critical* methods of meaningful cultural agency and transition. There is, for example, a developing postmodern response to the brave new world of biotechnologies and to the cultural debate over their development and deployment. Indeed, as Kane suggests in this issue, it was the hesitant yet still reigning high priest of postmodernity, Baudrillard, who was one of the first to manifest an awareness of impending biotechnological meltdown and cultural confusion, when, reviewing the ethical significance of cloning in 1981, he argued that the reproductive concerns of the mother and father are fast being overtaken by what he later called “the hell of the same,” or, the simultaneous appearance of the matrix of the code and the disappearance of the Other into the endless reproduction of the self.<sup>2</sup>

Even so, a number of contemporary cultural theorists of technology are presently engaged not so much in advancing forms of theoretical inquiry that seek to survey the ruins of modernism or postmodernism but in accelerating methods of exploration that endeavour to unearth the foundations of what Arthur and Marilouise Kroker have labelled – in this issue – “hypermodernism.” Without question, the growing contemporary interest in technology is linked to a number of “excessive” artistic, philosophical, scientific, and epistemological shifts connected to the “hypermodernisation” of cultural theory.<sup>3</sup> However, it is important to state that hypermodern conceptions of technology are neither a defence nor an attack on the theory of artistic, philosophical, and scientific modernism. Nor are such technological discussions a defence or a reaction against the idea of modernity. Rather, they are designed to provide an approach to the study of

technology in the present period that is eclectic and open-minded. For, now that the anarchical rejection of all the “metanarratives” has become the grandest narrative of all, cultural and theoretical “progress” depends not on abandoning Marx, modernism, and modernity, but on seeking out new questions concerning technology that go beyond both Marx’s modernism and Baudrillard’s postmodernism and on into what the Krokers call “recombinant” theory for a recombinant time.”

There are, then, a variety of contemporary cultural theorists of technology who, while not self-professed signatories to the hypermodern declaration of interdependence, nevertheless, share a recombinant perspective on contemporary cultural life. In literary criticism, cultural and economic geography, for example, the (often controversial) aftermath of Marx’s conception of technology and cultural theory can be seen in the writings of Berman (1988) on “the experience of modernity,” in the “post-situationist” work of Home (1997) on the technocultural avant-garde, and in Sassen’s (1998) analysis of the consequences of globalisation. Additionally, there have been a number of contributions to the analysis of technology from post-structuralist theorists and writers on deconstruction, cultural identity, power, war, and the state. In this intellectual province, there have been significant sociological, cultural, and political developments in the work of Derrida (1996), Ballard (1996), and Gray (1997). The contemporary feminist reaction to Haraway’s (1985) “Manifesto for Cyborgs” has recently produced a hypermodern approach to the body and technology from “cyber-feminists” such as Golding (1997). Within postmodern cultural theory, the repercussions of Baudrillard’s (1994b) discussions of technology and historical reversal are clearly observable in the writings of Cushman and Mestrovic (1996) on the failed responses of the West to the wars in the Balkans. Meanwhile, the growing hypermodern aesthetic interest in the theoretical and technical activities of the military industrial complex with regard to the virtualisation of space, speed, political control, and the impending global apocalypse has been further fuelled by the recent writings of Virilio (1998), Deleuze (1998), and the collective work of performance artists such as Survival Research Laboratories (Van Proyen 1998).<sup>4</sup>

Attempting to comprehend all these approaches to technology and the current theorisation of culture is not easy. Nonetheless, the Krovers' efforts to characterise technology as a constituent part of the contemporary emergence of recombinant cultural theory – surely a phenomenon that catches the technological mood of our times – comes close to capturing what I shall call *new cultural theory*. New cultural theorists, therefore, demand a recombinant approach to technology – a perspective that is based on their contemporary cultural experience of everyday life. To be sure, it is for this reason that new cultural theorists are currently acknowledging the importance of Marxism, post-situationism, post-structuralism, cyberfeminism, and postmodernism. In short, a growing number of new cultural theorists are taking to scavenging among the remnants of modernism and postmodernism to construct hypermodern and recombinant cultural theories of technology.

This issue is, as a result, firstly concerned with constructing a recombinant image of technology through a multitude of contemporary cultural debates. Fashioning such an image of technology does not necessarily involve the complete abandonment of modernism, postmodernism, modernity, history, and radical conceptions of culture derived from Marx. For, in the age of the recombinant world-picture, foraging among the fragments of cultural doctrines and debates is an extremely important activity. Accordingly, the contemporary questioning of technology and the new cultural theories contained in the first section of this volume make use of the achievements of thinkers from Marx to Virilio.

The current situation contrasts sharply with that of the early 1980s, when a postmodern theorist such as Baudrillard could confidently assume that technology, and certainly biotechnology, remained at the outer limits of cultural debate. Yet, Baudrillard's (1994a, 100) initial observations about the supremacy of industrial and positivist perceptions of cloning technology in "the age of soft technologies" are presently giving way to a substantial number of technological and political explorations and debates springing from within new cultural theory. Consequently, a second major concern of this special issue of *Angelaki* is the relationship between new cultural theory and *technopolitics*.

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## technopolitics

The concept of technopolitics is associated with the emerging significance within new cultural theory of "autonomist Marxism," "anarchy," and other radical political ideas. For new cultural theorists have posed the question of technology through theoretical discussions and contentions about the nature, desirability, and direction of contemporary political transformation. Subsequently, new cultural theorists have been closely involved in a variety of regularly hostile technopolitical encounters with the advocates of critical theory and what is sometimes referred to as "anarchISM" (*sic*), or, the traditional forms of anarchism derived from Godwin, Proudhon, Bakunin, and Kropotkin.<sup>5</sup> However, to complicate matters still further, new cultural theoretical writers have also questioned each other's conceptions of technopolitics. There are, then, a number of technopolitical debates presently taking place that echo and attend to the new cultural theoretical critique of classical, positivist, Marxist, and modern conceptions of technology.

The majority of writers on technopolitics have been centrally engaged in the development of – and the debates about – the character of new cultural theory. This is because the expanding fascination with technopolitics is linked to a variety of contemporary technological and political changes. Technopolitical commentators are, for instance, presently interested in a range of issues from globalisation and cyberculture to virtual reality, speed, sexuality, touch, distance, philosophy, and aesthetics. These themes are also intimately associated with the hypermodernisation of cultural theory.

Cleaver (1998), for example, is well known for his technopolitical critique of critical theory, his work on the Internet, autonomist Marxism, and the Zapatista rebellion in southern Mexico. Likewise, Witheford (1997) is celebrated for his autonomist writings on "high-tech capitalism" and class struggle. Zerzan (1994), meanwhile, is noted for his "nihilist" articles on technology, anarchy, and the "catastrophe" of postmodern politics. In turn, Bey (1991) and Black (1997) are recognised for their efforts to articulate a conception of technology within the context of "ontological anarchy" and "anarchy after Leftism." Simultaneously, the Lacanian psychoanalyst and social psychologist

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Turkle (1995) has analysed the links between technology and the sexual politics of cultural identity, while Deleuze and Guattari (1988) and Virilio (1986) are renowned for their poststructuralist-influenced work on "nomadology," "the war machine," and "dromology," or, the logic of speed. At the same time, cyberfeminists such as Plant (1997) have written on the relationship between women, nature, and "the new scientific paradigms." Exploring the political significance for women of technological innovation, Plant's writings on the "intimate relations" and revolutionary conclusions of "weaving," touch, and cybernetic communication arguably presage the "unmanned" technoculture of the future. Other cyberfeminists, like Wilding (1999), have also written on the new technoculture and its political implications for women's bodies. Equally significant has been the existential and postmodern interest in virtual communities, cyberpolitics, and "technological mediation." The separate "post-geographical," technopolitical, and "networked" visions of Mitchell (1995), Virilio (1995), and Latour (1996) on the "Infobahn," the "art of the motor," and "the love of technology," for instance, offer various prospects. Such prospects are represented by their individual discussions of "the city of bits," "the motorization of art," and the advent of "non-humans." These discussions of novel forms of cyber-urbanism, cultural politics, and artefactual relations challenge many recently held assumptions. A final area is the hypermodern study of avant-garde technocultural practices, nomadic power, and the ethical implications of cyborgs and eugenics. This aesthetic approach to technopolitics is presently proving to be an extremely useful perspective on the role played by technology in the contemporary political categorisation of various cultural theorists and non-rational strategies of cultural resistance. In this area, the performances and writings of the artists Anderson (1994) and Stelarc (1997), together with the recent work of Bey, Kroker and Weinstein (1994), and that of Barbrook and Cameron (1996) on the Internet, the role of the state, and questions of democratic access, have been fundamental to the development and writings of American artistic collectives such as Critical Art Ensemble (CAE) (1994, 1996, and 1998).

Clearly, the arrival of technopolitics can only be understood as an increasingly widespread recognition

of the fact that technology is now central to the essence, operation, and course of contemporary political life. Technopolitics eschews the idea that technology can, in any meaningful sense, be separated from politics. It is for these reasons that, in the second section of this volume, the authors zoom in on technopolitics through a variety of debates developing from autonomist Marxism, anarchy, cyberfeminism, poststructuralism, postmodernism, and hypermodernism. Still, the key questions in this context run along the following lines: what sorts of assertions are being made about technopolitics? What is it about the nature of present technological developments that supports the use of a concept such as technopolitics? These are important questions because not all the approaches to technopolitics outlined above have found universal acceptance of their technological perspective or agreement on their notions of the political. Indeed, at the present time, there are substantial differences among many technopolitical theorists over the characterisation of technology and its connections to political theory and political change. Thus, although some articles contained in the second section draw on the work of Cleaver and Witheford, they do so with the purpose of debating the technopolitical nature of globalisation and the merits of Bey's ontological anarchy. Other articles appropriate the writings of Deleuze and Guattari to critically engage with the psychoanalytic work of Turkle and Žižek (1997). Similarly, a number of authors apply Virilio's theoretical writings to analyses and comparisons of the work of Deleuze and Guattari and Plant. Finally, Heidegger's, Latour's, and Bey's writings are employed to mount separate technopolitical critiques of the work of Mitchell, Virilio, Guattari, the Krovers, and Barbrook and Cameron.

A number of theoretical claims, counterclaims, and debates about technology are therefore emerging within the field of new cultural theory and technopolitics. Indeed, these contemporary cultural and political debates over technology are the chief reason why this special issue of *Angelaki* has been assembled. But why are the cultural theoretical and political investigations into technology in this issue so important? What kinds of approaches have been persuasive in current debates, and which have moulded the articles in this issue? These questions are the subject of the next section.

## machinic modulations

There can be no doubt that cultural and political research on technology is mounting in importance within the theoretical humanities and social sciences. Nevertheless, the reason for the current wave of concern is that technology is increasingly the focus of critical cultural attention and radical political debates over its significance in the creation and development of new cultural and political practices. Moreover, new cultural and technopolitical approaches are not concerned with building theoretical frameworks that aim to "explain" technology. Rather, such approaches seek to develop new cultural and political theoretical perspectives that dispense with totalising and uniform academic ground plans. In short, sometimes individually, sometimes in conjunction with other approaches, new cultural theoretical and technopolitical perspectives clarify one or more of the cultural and political expressions of what I shall call *machinic modulations*. In the following two subsections, then, the contents of the first and second sections of this special issue of *Angelaki* are briefly contextualised and outlined. The first subsection relates to the theorisation of technology in the determination of new cultural practices. The second subsection concerns itself with the theorisation of technology in the determination of new political practices.

### *i. the importance of theorising technology in the determination of new cultural practices: from marx to virilio*

Technology is one of the most important factors in the determination of new cultural practices. Many cultural practices are, for the most part, representations of technological impulses. Most new cultural theorists therefore assume that technology is a key component in the foundation and advancement of new cultural practices. Theoretically speaking, it is probably true to say that Marx is the original source for this kind of perspective on the relationship between technology and culture. It was Marx, for instance, who initially stressed that technological change could explain the apparently contradictory facts of modern cultural life:

On the one hand, there have started into life industrial and scientific forces that no epoch of

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human history has ever suspected. On the other hand, there exist symptoms of decay, far surpassing the horrors of the latter times of the Roman Empire. In our days, everything seems pregnant with its contrary. Machinery, gifted with the wonderful power of shortening and fructifying human labour, we behold starving it and overworking it. The newfangled sources of wealth, by some weird spell, are turned into sources of want. The victories of art seem bought by the loss of character. At the same pace that mankind masters nature, man seems to become enslaved to other men or to his own infamy. Even the pure light of science seems unable to shine but on the dark background of ignorance. All our inventions and progress seem to result in endowing material forces with intellectual life, and stultifying human life into a material force. (quoted in Berman 1988, 19-20)

The power of Marx's theoretical analysis lies in the fact that he shows us why cultural practices are often the product of "industrial and scientific forces." Technological transformations do not merely engender increased productivity, wealth, social decay, and poverty. They also lead to new sorts of cultural practices. Beginning with Marx, then, cultural practices are seen, in part, as an expression of the logic of technology. In the lead article, "All That is Solid Melts into Airwaves," Wark develops Marx and Engels' famous declaration in the *Manifesto of the Communist Party* that, under bourgeois and increasingly global market conditions, "all that is solid melts into air." Analysing the significance of theorising technology in the context of information overload, Wark argues that, today, the digitised and archived text of the *Manifesto* succeeds as "pure information" but fails because its "very mobility prevents it from taking root." Drawing on the work of Debord (1983), the leading Marxist, situationist, and theorist of "the spectacle" (i.e., alienated imagery), Wark reminds us that the new technologies of information and communication are, *simultaneously*, the agents of cultural separation and the harbingers of new forms of writing practice. Situationism is also the starting point for Bonnett's theoretical and technocultural considerations in the second article. Nevertheless, while Bonnett begins

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by discussing the uneasy relationship between technology, situationism, urban, and political strategies in the 1950s and 1960s, he quickly flashes forward to the late 1990s. This latter movement is achieved through Bonnett's engaging evocation of the contemporary activities of the post-situationist Association of Autonomous Astronauts and its current re-invention of the idea of technology, or, more precisely, the cultural politics of proletarian space travel.

Meanwhile, in his interview "Theory, Technology and Cultural Power," with Roberts, Castells rejects his previous allegiance to Althusser's structuralist Marxism. Thus, although he retains the use of a number of basic Marxian concepts such as class struggle in his recent work, *The Rise of the Network Society* (1996), Castells nevertheless maintains that his work can no longer be considered Marxist. However, as he demonstrates in the fascinating discussion contained here – and which covers topics ranging from postmodernism, technology, cultural space, and the rise of global elites to the nation-state, cultural identity, the Zapatistas, and what Castells calls "the culture of real virtuality" – his work remains animated by "the kinds of questions that Marxism used to ask, by the attempt to link social structure to collective action, by the interplay between culture, politics, technology, and economic processes, and by the ever present realization that exploitation, and oppression, continue to mark the human condition."

For Derrida (1996, 16-17, emphases in original) too, technology is central in the determination of new cultural practices. As he puts it within the framework of poststructuralist theories and "dreams" about an imagined historical archive of Freudian psychoanalysis founded on computer technology and e-mail communication: "the technical structure of the *archiving* archive ... determines the structure of the *archivable* content even in its very coming into existence and in its relationship to the future." Although much current cultural theoretical interest in technology merely echoes Derrida's initial forays into "nuclear criticism," computers, e-mail, and the archive, Boyne's article elaborates a poststructuralist synthesis of the work of Derrida, Blanchot, Marx, Kristeva, and Cronenberg's film of Ballard's novel, *Crash*. Here, Boyne aims to theorise the crash not as an "accident" but as "the essential expression of the epoch." For Cronenberg, as Boyne

relates, seeks to venture into "the reshaping of the human body by technology," an "embodied personal utopia in which time stands still, but in which life is far from on hold." The car crash, then, is the emblematic and twisted machinic representation of contemporary inertia, extension, and repetition.

But, as Nietzsche (1977, 279) argued, one cannot fully comprehend the emergence of modern cultural practices simply by studying what he called the "premises of the machine age." As Nietzsche suggested: "The press, the machine, the railway, the telegraph are premises whose thousand year conclusion no one has yet dared to draw." On the one hand, therefore, understanding the logic of technology requires an open mind. On the other, it appears that the logic of technology does, at least on occasion, presage not the construction but the *destruction* of new cultural practices. In his renowned article on "The Work of Art in the Age of Mechanical Reproduction" (1969, 217-51), for example, Benjamin argues that war can be characterised as a "rebellion of technology." In fact, he suggests that: "if the natural utilisation of productive forces is impeded by the property system, the increase in technical devices, in speed, and in the sources of energy will press for an unnatural utilisation, and this is found in war." For Benjamin, then, the technology of capitalism is intimately linked to war: "Only war makes it possible to mobilise all of today's technical resources while maintaining the property system." The poststructuralist writings of Derrida and Nietzsche, together with the critical theoretical work of Benjamin, as Der Derian argues in his article, "A Virtual Theory of Global Politics, Mimetic War, and the Spectral State," present a variety of insights into sovereignty, globalisation, realism, and virtual technologies. Der Derian suggests that, in the present period, "not even the state, the foundation of *Realpolitik*, is immune from virtualisation." However, since, for him, neither Derrida's nor Nietzsche's writings can "keep up with the avant-garde of the war machine," Der Derian (re)turns to Benjamin's reconceptualisation of mimesis as the aesthetics of violence before considering the contributions of Baudrillard and Virilio on "hyperreal" and virtual war from a vantage point that encompasses, amongst other things, the contemporary "Revolution in Military



Affairs," the historical development of mechanised warfare, and the non-inevitability of either actual or virtual war.

At the same time, and investigating the hypermodern, Kroker (1992, 3) speaks of how "technological society is described under the sign of possessed individualism: an invasive power where life is enfolded within the dynamic technological language of virtual reality," while the cyberfeminist Haraway (1991, 6) claims that "technology has determined what counts as our own bodies in crucial ways." In their interview with Armitage, Arthur and Marilouise Kroker expand on the approaches initially advanced by Marx, Nietzsche, and Haraway to furnish a hypermodern and recombinant account of the "data body" and contemporary sexual practices. Discussing "the age of technology," the Krokers argue that the "so-called autonomous body" has been broken "into a thousand digital mirrors." Indeed, for them, the data body is "the recombinant body." As a result, and examining the recent writings of a variety of new cultural theorists, the Krokers clarify their premise that sexual practices are less the outcome of grounded and corporeal bodies and more the result of the transnationalised and corporate bodies of the "biotech" industry.

In a similar vein, the postmodern Baudrillard (1993b, 44) holds that: "For technology as a whole, we could say what McLuhan says about the mass media: the medium becomes the message." But, for Baudrillard, as for McLuhan, technology "doesn't push things forward or transform the world, it becomes the world." In his article, "Bathos of Technology and Politics in Fourth Order Simulacra," Cane considers Baudrillard's conception of the new "viral order" – an order which apparently emanates from technologies as distinct as cloning and compact discs. He suggests that the cultural significance of Baudrillard's fourth order simulacra is the way in which they help us to understand not simply current technological uncertainties in the era of "transpolitics" but the cultural manifestations of chaos theory, "inverse exponentiality," "the virtualisation of the world," technical mastery, reversibility, and the apocalypse – perhaps the final "irony of technology."

Technology, the cultural politics of virtuality, and impending catastrophe are also the launch pad

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for the hypermodern discussion on the explosive fallout from the information revolution by Virilio and Kittler in their conversation. Signalling the danger of conceiving of technology as a neutral instrument, Virilio and Kittler highlight their differing political concerns about the impact of new information and communications technologies on war, urban development, time, and the catastrophic dimensions of contemporary cultural life. In his article, "Data Crash: Apocalypse and Global Economic Crisis," Weinstein amplifies Virilio's and his own recent writings through an analysis of the relationship between virtual technologies and "apocalyptic thinking." For, although the idea of a technologically induced apocalypse is obviously the backdrop to Virilio's current theoretical interest in the "global accident," Weinstein nevertheless asks a fundamental question: why is it that "virtual technotopia" and "catastrophic apocalyptic breakdown" remain beyond the purview of so many of today's cultural theorists when such developments are clearly two sides of the same coin? Outlining the contemporary emergence of "androids" and Virilio's "terminal citizens," Weinstein argues that the twin political faces of technotopia and the apocalypse are reflected in the concurrent emergence of "pan-capitalism" and "retro-fascism."

Virilio (1997, 172) primarily views himself not as a philosopher or as a social scientist but "as a critic of the art of technology." Moreover, his work is much taken with the impact of the military-industrial complex on artistic endeavours. In her contribution, Wilson builds on the work of Virilio and others to provide a powerful hypermodern artistic representation of gravity, awkwardness, and technological displacement. Investigating motion sickness experiments as medical, military, and artistic practices, Wilson illustrates how such procedures in the Canadian university sector rapidly became a key component of the mission of the space shuttle *Columbia* in 1996. For Wilson, though, these kinds of experiments lead on to more earthbound cultural speculations about a range of current attempts to reassert human physicality through simulated technological "vehicles" like the large format IMAX cinema screen.

In short, for Marx and for Debord, for Derrida and for Nietzsche, for Benjamin and for Haraway, for Baudrillard and for all the contributors to

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section one of this special issue, the logic of technology is one of the most influential elements in the determination of new cultural practices.

### *ii. the importance of technology in the determination of new political practices: from cleaver to critical art ensemble*

What, then, of the theorisation of technology in the determination of new political practices? How useful are technopolitical approaches? Without question, technology lies at the centre of a whole host of newly emergent political activities and approaches in the present period. Moreover, it is for these reasons that the technopolitical authors in this issue either draw on or comment on other theorists who make the link between new cultural theory and new political practices involving technology.

Cleaver (1997), for instance, is simply one among many theorists who consider the current era in terms of political and technological change. For Cleaver:

What we are seeing is a reconstitution of politics, an abandonment of the old institutions (trade unions and political parties) with which we are so familiar and have often tried to work through, and the problem is to figure how to elaborate new kinds of politics within and among struggles which are diverse and will not be homogenised... The end of capital is not going to involve, as far as things look at this point, a replacement of one homogeneous system by another homogeneous system. It is going to be more like what Marx evoked in the *Grundrisse*: an explosion, or, as people like Deleuze and Guattari like to say, the emergence of various lines of flight of alternative kinds of social relations and experience. The problem then is that of creating a politics of difference minimising antagonism. It is not a problem which will be solved automatically. Politics, especially new politics, always has to be constructed. (Cleaver 1997, 7)

One of the strengths of Cleaver's autonomist Marxist approach is that he successfully connects emergent political practices with the recomposition of technology. It is technology, for example, that is at the heart of what Cleaver (1998) calls "the inter-

national circulation of struggle." Indeed, for Cleaver, the indigenous revolt of the Zapatistas could not have made such an impression around the world without "the key role of computer communications." New technologies such as the Internet, therefore, alter the entire substructure of contemporary political practices. As a result, the present "reconstitution of politics" and the "abandonment of the old institutions" are culminating in a new kind of politics; a politics no longer based on homogeneity but on new lines of flight and on difference. These new lines of flight therefore involve the recognition of capital as a common foe. Furthermore, they also involve the construction of alternative forms of political organisation and encounters, sometimes in virtual space, sometimes in actual space. New political practices cannot, then, be constructed without the incorporation of the technological dimension. Cleaver's characterisation of contemporary technopolitics is one of a number of critical and autonomist Marxist sources for the research contained in Kellner's article "Globalisation from Below? Toward a Radical Democratic Technopolitics." In particular, Kellner looks at technopolitics as a "contested domain," while also focusing on the democratisation of computing, information, and a variety of oppositional political struggles ranging from the Zapatistas and the anti-NAFTA movements in the Americas to the McLibel and Clean Clothes campaigns in Europe.

However, as Bey (1991, 43-47) and Black (1997, 144-45, emphasis in original) have contended, not everyone is wholly convinced of the benefits of technology within the framework of new political practices. Bey's ontological and Black's "post-leftist anarchy," for instance, are both deeply critical of what the latter calls "the chronically unfulfilled liberatory promise of high technology." Undeniably, in their highly individualist ways, Bey and Black argue that the "New Anarchisms" have much appeal, not because, as Black puts it, "they pander to prevalent illusions but because they pander ... to prevalent *disillusions*. With technology, for instance." Nevertheless, in his article, Armitage provides a critical analysis of Bey's ontological anarchy and his conception of the "Temporary Autonomous Zone" from the perspective of autonomist Marxism. Questioning Bey's

writings on technology, politics, capitalism, and what the situationist Vaneigem (1994) called "the revolution of everyday life," Armitage's critique alerts us to the fact that, although there is much evidence of an expanding interest among autonomist Marxists and post-leftist anarchists in the importance of technopolitics, there are a variety of theoretical problems and disagreements that still need to be addressed.

Similarly, in her article, "Whither the Virtual: Slavoj Žižek and Cyberfeminism" Conley establishes a cyberfeminist and Deleuzian-inspired critique of Žižek's (1997, 127-67) essay, "Cyberspace, Or, The Unbearable Closure of Being." Surveying how women have explored "the transformations of subjectivities made possible by virtual spaces," and Žižek's critical evaluation of "cyberspace ideologists" such as Turkle, Conley suggests that, contrary to his intentions, Žižek's Hegelian reading of Lacan and cyberfeminism also implies a closure of being, albeit one that possibly leads to the opening of Deleuzian "becomings." Deleuze (1987, 13; 1995, 177-82), of course, viewed the spread of cybernetic machines and computers in the current phase of history as signifying the emergence of a new "image of thought" founded on the development of the modern state and what he termed "control societies." To be sure, for Deleuze, the entire history of philosophy is "shot through with the project of becoming the official language of the Pure State." Focusing on Deleuze and Guattari's approach to technology, the state, and speed in their major philosophical work, *A Thousand Plateaus* (1988), Crogan explains how Virilio's philosophical discussions of dromology have played a crucial role in the development of Deleuze and Guattari's conception of technopolitics. For Crogan, Deleuze and Guattari's strained efforts to incorporate Virilio's technopolitical ideas into their own fall some way short of their ambitions. Indeed, according to Crogan, such efforts threaten to undermine the entire viability of Deleuze and Guattari's account of the state.

Accordingly, in the age of Deleuzian cybernetic machines, control, and speed politics, it is hardly surprising to find cyberfeminists such as Plant arguing that women might well be advised to make a political alliance with machines if they are to successfully challenge the structures of patriarchal

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dominance. As Wilding (1999, 1) puts it in the context of a cyberfeminist discussion of global capitalism, technology, and women's bodies: "For those who would resist the relentless erasures of history and try to disturb the monumental reign of market ideology, it is necessary to muster all their knowledge and cunning to find ways of creating active nodes of subversion and resistance on however modest a scale." Even so, in his article, Dery mounts a critique of Plant's (1997) latest work, *Zeros + Ones: Digital Women + The New Technoculture*. Initially situating her writings within the framework of contemporary cyberfeminist literature, Dery's essay evolves into a cutting appraisal of Plant's argument that the new era of technoculture is premised on the feminine. Specifically, Dery criticises Plant's work for its reliance on biological determinist claims about "the genetic inferiority of men." Arguing that Wilding's visions of subversion and resistance are missing from Plant's writings, Dery suggests that Plant's "belief that all women need to do is hitch a ride on a *Zeitgeist* that is going their way is a fatal seduction." Plant's recent work, along with that of Virilio, is also the point of departure for the philosophical considerations on technopolitics by Vasseleu in her article, "Touch, Digital Communication and the Ticklish." Drawing on the writings of Kant, Levinas, Merleau-Ponty, and Irigaray, Vasseleu questions Plant's and Virilio's separate assertions involving the relationship between touch, technology, vision, distance, and closeness. To be sure, for Vasseleu, Plant's and Virilio's individual conceptions of the relationship between touch, power, and digital technology are at once novel and highly contestable notions.

Vasseleu's reflections on technopolitics were also at the heart of Heidegger's (1978, 321; 1966, 55-56, emphases in original) primary existential questioning of technology. Taking as his example the hydroelectric plant on the Rhine, Heidegger suggested that the "greatest danger" was not so much the impact of technology on the human body but that "the approaching tide of technological revolution in the atomic age could so captivate, bewitch, dazzle, and beguile man that calculative thinking may some day come to be accepted and practised as *the only way of thinking*." As for a vision of resistance to technological domination, Heidegger argued that

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such resistance was indeed possible. Nonetheless, for him, it was a matter of saying “‘yes’ and at the same time ‘no.’” Indeed, Heidegger spoke of the “*releasement toward things*.” As he put it, “I call the comportment which enables us to keep open to the meaning in technology, *openness to the mystery*.” In his article, Robins augments Heidegger’s perspective and, in the process, contributes a productive critique of so-called virtual communities while studying the proposed “elimination of distance” and “geographical difference” in the recent writings of Mitchell (1995). The forcefulness of Robins’ critique is that it shows how Mitchell’s calculative, “post-geographical,” and “intimate” image of technopolitics involves neither a “releasement toward things” nor an “openness to the mystery” but, rather, an “anti-experiential” and “anti-political vision of the technoculture.”

The work of Heidegger is also a key reference point for Virilio (1997, 29). Virilio’s writings on new cultural theory and technopolitics have been influential on the work of several contributors to this issue. However, in his article, “Conducting Technologies: Virilio’s and Latour’s Philosophies of the Present State,” Crawford provides an enlightening comparative analysis of the relationship between Virilio and another French philosopher of technology, Latour (see, e.g., Latour 1992). As a result, Crawford’s article explores Latour’s and Virilio’s similarities and differences regarding their conceptions of technology, the human, the global, and the political. Suggesting somewhat controversially that much of Virilio’s critique of technology, speed, and politics is rather romantic, and, on occasion, reactionary, Crawford subsequently turns to Latour’s conception of technology as the “swerve.” Nevertheless, for Crawford, Latour’s various notions of decentred humans and technical objects are not superior to Virilio’s work on these issues but extensions of it. Following this line of argument, Crawford concludes that Virilio’s and Latour’s writings on “techno-glocal politics” are indeed complementary.

Lastly, there is a flourishing contemporary concern with the literary and aesthetic importance of technological representations and their significance in cultural debates and political practices. The offerings of writers and artists such as Burroughs (1972), Anderson, and Stelarc have been crucial to

the development of this phenomenon. Their works encompassing technology, culture, and politics have engendered unmistakable forms of cultural investigation into technological representations and political practices. Such avant-garde and “post-avant-garde” practices are also the current concern of sundry postmodern and hypermodern cultural and technopolitical theorists from Baudrillard (1998) and Virilio (1999) to Bey (1996) and the Krokiers. It is, though, perhaps legitimate to view the works of the writers and artists above as a continuation of the practices of Dada, Futurism, and Surrealism. For all three of these early-twentieth-century artistic movements established aesthetic approaches to technopolitics (Kolocotroni et al. 1998).

In his article, Zurbrugg engages with the work of Burroughs, Anderson, and Stelarc. But, in so doing, his aim is not simply to provide an overview of “avant-garde technocultural practices.” Rather, Zurbrugg seeks to question some of the recent technopolitical claims of a variety of cultural theorists. Arguing that neither Baudrillard’s nor Virilio’s “fatalism” concerning the future of technology, art, and politics is shared by a substantial number of practising artists, Zurbrugg discusses an increasingly common dilemma: whose diagnosis should one follow? The artist-practitioner’s? The cultural theorist’s? Both? His piece shows the potential pitfalls of becoming addicted to cultural and political theories that appear to take little account of actually existing avant-garde technocultural practices. The significance of technology in the determination of new cultural and political practices also lies at the centre of the final contribution, Little’s “Practical Anarchy: An Interview with Critical Art Ensemble.” Discussing the Ensemble’s recent book publications on topics ranging across “second wave eugenics,” speed, “electronic disobedience,” and anarchy, Little elucidates CAE’s points of agreement and disagreement with the individual works of Bey, the Krokiers, and the recent writings of Barbrook and Cameron before outlining a variety of hypermodern and thoroughly recombinant conceptions of “pan-capitalism,” political resistance, the commercialisation of the Internet, control, subjectivity, and new technocultural and political practices. CAE’s own contribution to contemporary technocultural and political practices

is well illustrated by the Ensemble's compelling image that accompanies the interview.

What all the political perspectives discussed here have in common is an open-ended willingness to recognise the complexity and significance of the part played by technology in the determination of contemporary cultural and political activities. Accordingly, their focus is on the absolute relentlessness of technological transformation in a time when the only form of cultural and political continuity is change. Moreover, viewing technology, culture, and politics in such a fashion allows us to grasp, if only by analogy, what I have called *machinic modulations*. For new cybernetic machines, computers, culture, and control form what Deleuze (1995, 177-182, emphases in original) labels "a system of varying geometry whose language is *digital*." As he correctly notes: "Confinements are *molds*, different moldings, while controls are a *modulation*." The idea of machinic modulations therefore provides us with a hypermodern and recombinant perspective on the spheres of technology, culture, and politics. And, "like a self-transmuting molding continually changing from one moment to the next, or like a sieve whose mesh varies from one point to another," both continuing and new technological, cultural, and political developments can be accommodated within it. Indeed, such a perspective entails the recognition of at least one unbroken thread that runs all the way from Marx to Deleuze. As the latter put it: "One thing it's true, hasn't changed – capitalism still keeps three quarters of humanity in extreme poverty, too poor to have debts and too numerous to be confined: control will have to deal not only with vanishing frontiers but with mushrooming shantytowns and ghettos." At the same time, "it may be that older means of control, borrowed from the old sovereign societies, will come back into play, adapted as necessary." Nevertheless, "the key thing is that we're at the beginning of something new."

Technology and its role in the modulation of new cultural and political practices is, then, an important research topic for the theoretical humanities and the social sciences in the current period. What is more, most of the perspectives on technology outlined above have been very much at the forefront of recent debates about new cultural theory and technopolitics. In this sense, they have shaped many

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of the articles in this issue. But there is nothing to stop other cultural and political researchers from attempting to chart the broader technological principles and developments in control at the present time. There are, though, a number of theoretical problems associated with the concept of technology and its relationship to new cultural theory and technopolitics that the reader should be aware of before embarking on the rest of this issue.

## into the fray

The most significant aspects of the theoretical perspectives on technology discussed above are that they help us not only to understand its nature and importance within new cultural theory and technopolitics but also in the creation and development of new cultural and political practices. Equally important is the fact that none of the perspectives considered are principally concerned with building gigantic theoretical edifices and conceptual "systems." For the most part, then, the thrust of the articles in this issue is toward a hypermodern and recombinant approach to technology; an approach that, in some cases, makes use of one predominant perspective, but, in others, involves the application of a variety of approaches. As Castells suggests in the interview with Roberts in this issue, "theory is a tool" and theoretical concepts often need to be "adapted" and "twisted" to meet specific needs and events. In this way, Castells' work can be seen as complementary to the other approaches to technology that have been outlined. One can, though, imagine a number of objections to the description of technology, new cultural theory, and technopolitics presented above. At the broadest level, such objections mostly revolve around the twin charges of technological determinism and the tendency to overestimate the role, importance, and scale of technology in contemporary cultural and political transformation.

Technological determinism? Technological determinism is normally defined as an approach to technology that holds that if a particular technique is technologically viable in theory then it is likely to be implemented in practice. It has to be admitted that in many regions of new cultural theory and technopolitics there is a certain amount of fatalism and "apocalyptic" thinking. One has only to

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consider the titles of some of the articles in this issue to detect that all is not well with the bond between technology and contemporary cultural and political life. However, the charge of technological determinism can only be sustained if one is of a mind to plead guilty to succumbing to its inducements. For this particular defendant, the problem is not whether to plead guilty or innocent when faced with such a charge; rather, it is a matter of questioning the authority of the court. Moreover, I like to consider myself in esteemed company, since numerous Marxists, poststructuralists, cyberfeminists, postmodernists, and hypermodernists have all been charged with the same offence on occasion (see, e.g., Feenberg 1999).

In this respect it could be argued that, instead of operating counter to the inducements of technological determinism, many of the contributors gathered here – particularly in the first section of the issue – are making a concerted effort to work *with*, or at least around, the seductions of technological determinism for radical cultural and political purposes. For example, even Castells, a theorist who firmly “rejects the notion of technological determinism,” still maintains that “technological characteristics do have a relative autonomy *vis-à-vis* their social environment.” As he states: “For instance, if we have computer networks instead of a world of mainframes, it follows that there is a much greater emphasis on flexibility and decentralised interaction, or at least social trends toward networking, and decentralised decision-making are enhanced, and made possible by the technology.” Here, then, technological determinism is not “rejected” but *relativised* socially, culturally, and politically. For the mere existence of computer networks encourages the demand for a much greater emphasis on cultural flexibility and decentralised political decision-making.

For many of the other contributors, though, the charge of technological determinism is neither to be rejected nor relativised. Instead, it is a question of coming to terms with the fact that, today, the traditional effort to maintain a distinction between technology and the cultural and political environment is, if not a completely redundant effort, then a problematic one. Support for such claims can be found in much of the literature on technology and post-structuralist politics. Deleuze and Guattari (1984,

284, emphasis in original), for example, argue that Butler’s “The Book of the Machines,” contained in his late-nineteenth-century novel *Erewhon* (1970), characterises the contemporary technocultural and political dilemma. This is because, for Deleuze and Guattari, Butler “*shatters the vitalist argument by calling into question the specific or personal unity of the organism, and the mechanistic argument even more decisively, by calling in question the structural unity of the machine.*” In other words, the historical separation made between technology, culture, and politics is at an end. Or, as Kittler remarks in his discussion with Virilio on “the information bomb”:

To me, the urgent question is: how are culture and politics going to react to the slow demotion of their power? For both are predicated upon everyday speech and the normal human nervous system, which are both slow. However, neither speech nor the nervous system can be handled any more without machines preparing, assisting, and, in the end, even assuming some of their decision-making processes. How does one react to these developments, as a philosopher, as a politician?

Today, many new cultural and political theorists react to these developments by asking whether the charge of technological determinism is either worth making or worth answering.

But what of the hypothetical objection that the theories and concepts adopted in this issue incline towards an exaggerated view of the function, significance, and scope of technology in the context of contemporary cultural and political change? Without a doubt, the question of technology lies at the centre of all the approaches to culture and politics that are considered in this issue. Moreover, it has to be recognised that, within the circumstances of present-day cultural and political transformation, it is extremely easy to become captivated by perspectives on technology that rely on a variety of rousing pronouncements and prefixes such as “the reconstitution of politics,” “new lines of flight,” “post-Leftist anarchy,” “new images of thought,” “new politicised cyberfeminism,” “postmodernism,” and “hypermodernism.” Not the least of the problems with such labels is that they mostly tell us what their advocates are opposed to but not

what they are in favour of, if anything. What, for example, does an expression like "the reconstitution of politics" actually mean? What did an old "line of flight" entail? What does a new one look like *in flight*? Furthermore, it is sometimes difficult to avoid the conclusion – and despite protestations to the contrary – that terms such as "postmodernism" indicate the inexorable unfolding of an inherently developing temporal procession in cultural and political theory and practice. It might be suggested, for instance, that an autonomist Marxist such as Cleaver (1998) over-emphasises the role of technology in "the reconstitution of politics" with regard to the struggles of the Zapatistas. But to what extent is Cleaver's approach a questionable one? Certainly, for him, computer communications are increasingly playing a key role in the reconstitution of contemporary cultural and political life. However, Cleaver is well aware that many of the difficulties associated with the advent of technopolitics (social access to the Internet, information overload, cross-postings, the production and consumption of information, etc.), stem not from the new political problems of cyberspace but from the old political problems of actual space. As he suggests, "personality conflicts, arrogance, sexism, racism, and all the other behavior patterns that have tortured or destroyed other kinds of political efforts have been reproduced on the 'Net.'" Thus, for Cleaver, "cyberspace is no privileged arena. All of the problems and battles we are familiar with elsewhere reappear there in all too familiar forms and constitute the first set of limitations to our ability to get our needs met." On the one hand, then, it is very easy to overestimate the part played by new technologies in the contemporary reconstitution of politics. On the other, it is also very easy to downplay the role of technology in contemporary political struggles. The real challenge is to be able to appreciate, at any one moment, both technological transformation and political continuity, and political transformation and technological continuity. Of course, responding to such challenges is not likely to be a calm affair. However, not responding is likely to be catastrophic.

## conclusion

By means of the differing analyses of new cultural theory and technopolitics, my aim as the editor of

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this special issue of *Angelaki* has been to reveal a wide spectrum of interest in technology. Technology is currently at the forefront of modern, postmodern, and hypermodern debates within the theoretical humanities and the social sciences. But while some may agree that technology is indeed an important theme in cultural and political theory, they may disagree with my characterisation of contemporary machinic, cultural theoretical, and technopolitical modulations. They may, for instance, view my eclectic and open-ended discussion of the importance of technology in the determination of new cultural and political practices as *too* varied and wide-ranging. Nonetheless, it is my contention that such variety not only echoes Deleuze's comment at the start of this Editorial Introduction that "machines don't explain anything" but also the diversity of the cultural and political controversies surrounding the debates over machines and the "collective arrangements" of which they are only one small but important part. By the same token, my adherence to providing an eclectic and open-ended arena for innovative approaches to technology needs to be understood in the broader context of *Angelaki*'s stated editorial commitment: "to foster the theory of minor movements, recognising their significant impact on and dynamic relation to the development of cultures, political spaces, and academic disciplines, and emphasising their formative power rather than their oppositional entrenchment." It is my hope that *Machinic Modulations: New Cultural Theory & Technopolitics* reflects such a commitment.



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## images

The cover image, "Schoolboy at the Controls of an Aeroplane Simulator, 29 December 1953" was selected by Louise K. Wilson and is reproduced courtesy of the Science and Society Picture Library of the Science Museum, London. The images that finish each article in this collection are by Louise K. Wilson: 1999 is the thirtieth anniversary of Apollo 11.

## notes

1 Gilles Deleuze, "Control and Becoming" in *Negotiations: 1972-1990*, trans. M. Joughin (New York: Columbia UP, 1995) 175.

2 Jean Baudrillard, "Clone Story" in *Simulacra and Simulation*, trans. S.F. Glaser (Ann Arbor: U of Michigan P, 1994a (1981)) 95-104. Jean Baudrillard, "The Hell of the Same" in *The Transparency of Evil: Essays on Extreme Phenomena*, trans. J. Benedict (London: Verso, 1993a (1990)) 113-23.

3 See, for instance, Arthur and Marilouise Kroker (eds.), *Digital Delirium* (Montreal: New World Perspectives, 1997).

4 For full details of the activities of Survival Research Laboratories (SRL) see the SRL webpage at: <http://www.srl.org/>.

5 The writer most closely associated with the term "anarchISM" is Hakim Bey. See, for example, his book *T.A.Z.* (1991). The most comprehensive recent history of traditional anarchism is Marshall (1993).

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John Armitage  
Division of Government & Politics  
University of Northumbria  
Newcastle upon Tyne NE1 8ST  
UK  
E-mail: john.armitage@unn.ac.uk

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**A**rthur and Marilouise Kroker are the well-known Canadian authors and editors of numerous books and articles on new cultural theory and technopolitics.<sup>2</sup> Drawing on Marx, Nietzsche, Virilio, and, above all, Baudrillard, their work is often associated with a nihilistic or catastrophic reading of "the postmodern scene," contemporary sexuality, and technology. They are also the editors of *CTHEORY* (www.ctheory.com), the premier electronic journal of theory, technology and culture on the Net.

### I theorising the data body

*John Armitage: To begin with, I'd like to explore your conception of the "data body." Obviously, much of your interest in this idea stems from your response to the importance of the body in postmodern culture. In earlier texts such as The Postmodern Scene, for example, you speak not only of "sex without secretions" and "excremental culture" but of "the disembodied eye," and "panic babies." However, since the publication of The Possessed Individual in 1992, and, most recently, Digital Delirium, your theoretical dissection of the body has taken what might be termed a "technological turn." Why is an analysis of the body, and, in particular, the data body, so important for you?*

Arthur & Marilouise Kroker: The body has always been the site of the most radical political, indeed eschatological, struggles – the decisive site for the inscription in flesh of power as it speaks the body future.

In the age of Christianity, the body was virtualised, split into warring bodies of flesh and grace, with the corporeal body undergoing almost two millennia of dogmatic purification, with fire, with the rack, with pincers, with the rope. In the age of capitalism, the body was commodified, sometimes colonised as exchange-value and sometimes invested by all the signs of advertising culture in that fateful transition of capitalism from the commodity-form to the sign-form, vivisected by a fourfold strategy of domination, from alienation (Marx), and reification (Lukács) to simulation (Baudrillard) and now virtualisation. In the age

john armitage

## DISSECTING THE DATA BODY

*an interview with arthur  
and marilouise kroker*<sup>1</sup>

of technology, the so-called autonomous body, this always doubled body of flesh and grace and use-value and exchange-value, shatters into a thousand digital mirrors. The data body. The android body. The mutant body. The designer body. The cloner body. The transsexual body. Digital flesh loop-cycling furiously within the limited space and time of a single (biological) life cycle: indeterminate, neutralised, floating.

The data body is the recombinant body: cloned by the bio-tech industry, spliced by artificial skin, digital nerves and networked intelligence, resequenced by the liquid signs of brand-name consumer advertising. Simultaneously the targeted axis of the interfacing of digital reality and bio-technology and the site of future political struggle where flesh rubs against the will to virtuality, the data body is, for better and for worse, the spearhead of technoculture.

The data body, then, as the new media future.

*JA: French feminist thinkers such as Luce Irigaray have focused on the body and its*

## dissecting the data body

*uncertain relationship to notions of différence, sexuality, and gender.*<sup>3</sup> Does your interest in the data body stem from this or from other theoretical traditions?

A&MK: Our trilogy of works on sexuality – *Body Invaders*, *The Hysterical Male*, and *The Last Sex* – represents a sexual migration on our part from a critique of the viral metastasis of phallogentrism (*Body Invaders*) and a parodying of the mutant penis (*The Hysterical Male*) to a theorisation of the recombinant sexual imaginary of *The Last Sex*.<sup>4</sup> While our sexual imaginary certainly coalesced in its critical beginnings with the animating spirit of New French Feminism, particularly Irigaray's *Speculum of the Other Woman*, our writings in *The Last Sex* represent an abrupt, and decisive, departure from the language of sexual *différence* and from a feminism that would seek to retheorise women's bodies under the fatal sign of an always male-coded sexual register. Our theorisation against the cult of gender in *The Last Sex* is the basis of all our present work on the future of the body. There, we said:

Maybe it was the cumulative psychological weight of the violent backlash against gays that caused this change. Perhaps it was the growing realization that the deeply fascist backlash against radical sexual politics couldn't be contested within the old feminist terrains that struggle to maintain the supremacy of the binary (genetic) codes. If feminism couldn't see its way to recombinant sex in the age of transgenders, then it was in serious danger of allying itself with vicious neo-conservative forces.

For us, transgender is the new relation of sexual production that corresponds to a new mode of technological production. Outlaw bodies are the insurgent sexual class who have an objective alliance with the ascendancy of recombinant culture. Rebelling against the "code of gender," they exhibit at the level of sexual aesthetics what recombinant technology exhibits economically at the level of technology." (*The Last Sex*).

JA: To what extent does the emergence of outlaw bodies signify the collapse of contemporary sexuality and the rise of a type of postmodern "asexuality"? Are conventional binary notions of male/female, gay/straight, now obsolete?

A&MK: Not only obsolete, but potentially the sources of a new wave of sexual conservatism.

Today, the urgent project for sexual politics is to finally escape the tyranny of the binary code, to revolt against the law of opposites, to refuse the closed loop cycle at the centre of the code. After Foucault's searing insights into the ironic play of cynical power, how can we be confident that binary oppositions are not themselves transgressions that work to confirm the power of the sexual code? In this case, the once and future history of late twentieth-century revolts against phallogentrism – gay and lesbian practices most of all – may well presage the reinstatement of the code as the ruling sexual regime at the millennium. Total refusal, then, of the tyranny of the binary code at the signifying heart of sex as the only possibility for the creation of a new order of sexual pleasures. A floating sex? A third sex? A transgendered sex? Who would have the courage for that?

JA: Is the postmodern "panic" about the cultural status of the body, self, and sexual identity the reason why sex and body-parts figure so prominently in your theoretical work?

A&MK: Yes, but in the form of two specifically political trajectories.

First, the postmodern panic about the "body" is, in actuality, panic about the breakdown of the unitary male ego and the phallogentrism within which the so-called autonomous solidity of the (male) body has been prefigured. This momentous rupturing of a many century's old encrustation, indeed imprisonment, of the body within the projected imaginary of the male ego has been brought about by a double subversion: a *digital* subversion whereby the old simulacrum of the body under the sign of the unitary male ego has been quickly reduced to a surplus category in the new economy of libidinal intensities surrounding the birth of the data body; and a

sexual subversion whereby the revolt of the previously excluded – gays, lesbians, transsexuals, last sex het's – has precipitated a quick deflation of the male-egoed body. Of course, as with any loss of privileged political status, the hegemonic sexual class doesn't disappear easily or without fierce resistance. That is probably what accounts for such a depressing global backlash taking the form of the politics of (sexual) *ressentiment* on the part of the last representatives of phallogentric ideology: from the Taliban of all the fundamentalisms of the world to the privileged class of cyberboys of all the digital elites of the (next) world.

Second, the disintegration of the so-called "unitary" body theorised under the sign of a rigidly policed language of sexual *différance* has been accompanied by a growing proclamation of the streamed body: transsexual, last sex, animal/human/bionic, gay/het/lesbian, a body saturated with all the signs of sex, that combines and recombines the signs of sexual identity, with no hint of essentialism, yet also with no denying that the recombinant quality of future sex is the only essential to a sex that would be cool, diffuse, and transparent. Wetware sex for the dry (political) times of the cool millennium.

In modern times, sexuality was defined under the sign of the phallogentric male ego.

In postmodern times, sexuality is interpreted under the differentiating language of sexual *différance*.

In hypermodern (digital) times, sexuality will be explored under the delirious signs of recombinant sex.

*JA: Before we move on to discuss your understanding of the data body and technopolitics, I would like to ask how, if at all, Jean Baudrillard's Nietzschean inflected conception of "seduction" has influenced your thinking on the female body? For instance, some feminists have suggested that Baudrillard's ideas about seduction are inherently sexist – what is your position?*

*A&MK: Anyone who would claim that Baudrillard's theorisation of "seduction" is sexist clearly has not understood his writings.*

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From *Symbolic Exchange and Death* to *Seduction* and beyond, Baudrillard's project has been to tease out the referential illusion at the cynical centre of power.<sup>5</sup> All his writings are variations on the same mythic theme: the plague-like contamination of the horizon of the social by the commutative ecstasy of a universal death drive rooted in the "structural law of value," with our reduction to the desolation of a cool transparency – cool sex, cool technology, cool culture, cool exterminism.

With Baudrillard, we assent to the perspective that sex in the modern age has always been theorised within exclusively male parameters, within, that is, the binary terms of (male) pleasure and (female) repression. We also assent to the key political insight that it makes absolutely no difference if the terms of power are reversed into a new tutelary of (feminine) seduction. What matters is the abolition of the code, not the infinite reproduction of the code of (sexual) power on behalf of a new regime of sexual orthodoxies.

Beyond Baudrillard, we are convinced that the only good sex is recombinant sex. We are interested in the sexual pleasures of organic flesh and the organic ecstasies of digital flesh, the games of seduction and denial played in the tension between the data body and flesh of blood and bone and silent desires in the sun of the midnight sky. For an outlaw sex, then, a last sex, that would rebel against sexual specificity in favour of excess rage, excess passion, excess love, excess perversion. Against the will to (sexual) purity, we propose a new sexual practice that because it is virtual is no less rooted in the bodies of flesh and tech and drugs and pleasures. A recombinant sex that rubs and licks and whispers and strokes different sexual practices and registers, a virtual sex that refuses to honour sexual *différance*, a sex without a name except, perhaps, for the last sex because it is a sex for desires yet unborn.

## II the data body and technopolitics

*JA: Although the body is a central feature of much contemporary research in new cultural theory, I would like to focus on the relationship*

## dissecting the data body

*between the body and your theorisation of new information and communications technologies. In The Possessed Individual, for instance, you argue that the chief contribution of French theorists such as Baudrillard and Paul Virilio is an account of technology as "cynical power." Could you explain this position?*

AK: Cynical power is power in the final phase of micro-fascism. Not power as physical coercion (the age of alienation), nor power as repressive ideology (the era of reification), and certainly not power as an alibi for the death of the social (the phase of simulation), but cynical power as the form power takes in the age of the virtual. Appearing on the stage of human history as an empty sign of its own disappearance, cynical power is the pulsar-like code that programs the organism, the body, the cultural environment, the drive to planetary mastery on the part of the technological dynamo. A post-binary code that folds the modernist antinomies – self and other, nature and culture, essence and experience – into a mirror of domination. Self-referential, random in its movements, always internally contradictory because always flipping the fabled so-called opposites of modernist culture, cynical power is hegemonic ideology today. It's what the British social theorist, Anthony Giddens, has reverentially described as the "third way" of "reflexive modernization." The "third way" – that's cynical power as the political form of micro-fascism at the millennium.<sup>6</sup>

JA: *Of course, I understand that the technological dynamo is at the centre of contemporary "prosthetic culture," "second wave eugenics," and what Virilio calls "the transplant revolution." However, what I do not fully understand is why people actively will high performance, "posthuman," or so-called "virtual empowerment." How do you respond to this phenomenon?*<sup>7</sup>

A&MK: There are two contradictory responses, both of which are equally true.

First, an essential aspect of the ideology of the virtual class is the seduction of digital reality. Perhaps because of humiliated subjectivity

or a growing sense of the inadequacy of human flesh in the (virtual) face of cyber-machines or a deep, spell-bound fascination with the pleasures of virtualisation, the consciousness of the virtual class is spearheaded by the dynamic language of "high performance," and "virtual empowerment." However, as Marshall McLuhan has said: how are you going to argue with people who insist on sticking their heads in the invisible teeth of the buzz saw of technology, and calling the whole thing "freedom"? Or, as Paul Virilio has eloquently theorised in *Open Sky*, contemporary technological culture is typified by acceleration to the point of frenzied disappearance, and the shutting down of the human body into immobile lumps of spastic flesh in front of computer terminals.<sup>8</sup> The Net as a waiting room for an event that never happens, and will never happen.

On the other hand, the spectre of new communication technologies has also ushered in the possibility of an electronic renaissance: forms of "virtual empowerment" and posthuman imaginations that reflect people trying desperately to claw their way out of the grid-ded space of late capitalist culture. In *A Thousand Plateaus*, Deleuze and Guattari speak evocatively of our suffocation in a despotic culture of "facialisation" – a one-code facialisation of the body, imaginations, production, fashion, identity.<sup>9</sup> Perhaps the turn to liberated forms of "virtual empowerment" is also part of a more ancient human impulse to resist the facialisation of digital culture (under the sign of pan-capitalism) by struggling for "freed (digital) faciality."

Like everything else, digital reality consists of both the molar and molecular, of smooth and striated space, of creative intensities and dead grids: it is within this plane of (digital) consistency that the flow of subjectivity towards "high performance" and "degraded performance," between "virtual empowerment" and "vague indifference" should be understood. In our book, *Digital Delirium*, we have theorised a new renaissance in the making, a *digital renaissance*, where writers are internalising, retheorising and mutating the

codes. It's about hypertext logic, informatics theory, clonal dance, and cyber-Situationism.

Theory in the data storm.

*JA: The "cyberfeminist" Sadie Plant claims that the era of male control over technological change is drawing to a close as women take charge of the machinery of cyberspace in the digital age. What is your reaction to such radical claims?*<sup>10</sup>

A&MK: Digital reality is like a blinding sun that has hidden from view the approaching catastrophe of biotechnology. Already in these premonitory opening moments of the "biotech century," we can no longer speak sanguinely about binary divisions between the male and the female, but, perhaps, of the sudden mutation of gender itself into recombinant life-forms. Such a radical, decisive, and unexpected transformation in the nature of bioreality must, and will, effect an equally radical, decisive, and probably unanticipated changes in the nature not only of cyberfeminism, but also of queer and lesbian theory under the sign of the biocyber. Sadie Plant's interesting critique of gender and technology was formulated in terms of the digital. It should be understood alongside other forms of cyberfeminism that intersect the cyber and the bio, namely Sue Golding's manifesto for a "third sex" in her book, *The Eight Technologies of Otherness*.<sup>11</sup>

*JA: Lastly, it seems to me that what separates your theoretical position on the data body and technopolitics from Plant is that while she is broadly optimistic about the prospective advances for women in the new technoculture, you, on the other hand, are "hyper-pessimistic" about the future of "cybersexuality" and the new forms of disembodiment. Is this a correct reading of your work?*

A&MK: We are not pessimistic "about the prospective advances for women in the new technoculture." In *The Last Sex*, we've discussed in detail issues of transgender, intersex states, virtual sexuality: the creative forms that feminism will take in the 21st century. That's why we are interested in the creation of a virus-free gender, a transgenic gender. Of course,

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the overwhelming power of biotech under the global control of pan-capitalism means that many of these creative possibilities will be actively resisted. This is a matter, then, of political struggle, not of "hyper-pessimism."

So, we think that it's politically naive today to speak of an easy division between optimism and pessimism. Indeed, the binary code of optimism and pessimism is itself part of the ruling logic of cynical power. In every way, our writing represents a sustained criticism of the prison-house of binary logic, a will to create "intensities" – ambivalent, parodic, ironic, poetics and polemics – that occupy the new continent of the void. In void culture, which is to say in contemporary culture, something new can be created only by rubbing together a real lived sense of the absurd with lived practical, and intellectual, resistance. For us, this doubled moment of total negation and total affirmation has taken many names: the pleasures of the "last sex," the critique of the "possessed individual," the digital renaissance of "hacking the future," the theory of the new (digital) ruling class of "data trash," the cyber-Dadaism of "spasm," the philosophy of refusal of the "excremental culture" of the postmodern scene.

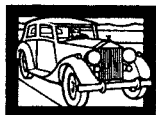
Writing about the data body and technology, biotech is the recombinant eye that opens onto the future of the next century. For example, in the last few days, stories in the press have reported on British Telecom's "soul catcher," Israel's "ethno bomb," America's "stem cell" research for "growing" human cells, gene therapy experiments where patients can grow their own heart bypasses, hybrid cells for mutating à la Dr. Frankenstein part-human/part-cow cells, and the entire field of bio-informatics where drug testing can be done on "virtual organs" and "virtual patients." Confronted with the daily eugenic findings of a biotech industry that mutates, clones, and recombines the future of the human species without the slightest sound of ethical resistance, talking in old terms about the body and technology doesn't work. As one scientist has said recently: "We are awash in data but starving for knowledge." We would add: We are awash in (bio)data and



## dissecting the data body

(bio)experiments and (bio)knowledge, but starving for bioethics. The old questions and old attitudes have been objectively superseded. Biotech is our reality, and a political ethics that matters can only be created on the basis of a deep understanding of that reality.

Recombinant theory, then,  
for a recombinant time.



### notes

1 This interview was conducted on e-mail during the autumn of 1998. I would like to thank Arthur and Marilouise for participating in it at such short notice. I am also grateful to Nicholas Zurbrugg for his helpful comments on an earlier draft.

2 See Arthur Kroker and David Cook's *The Postmodern Scene: Excremental Culture and Hyper-aesthetics* (London: Macmillan, 1988). Other useful references are: A. and M. Kroker (eds.), *Body Invaders, Sexuality and the Postmodern Condition* (London: Macmillan, 1988); A. Kroker, M. Kroker and D. Cook, *Panic Encyclopaedia* (London: Macmillan, 1989); A. Kroker, *The Possessed Individual: Technology and Postmodernity* (London: Macmillan, 1992); A. Kroker (with accompanying CD by Steve Gibson), *Spasm: Virtual Reality, Android Music and Electric Flesh* (Montreal: New World Perspectives, 1993); A. Kroker and M. Weinstein, *Data Trash: The Theory of the Virtual Class* (Montreal: New World Perspectives, 1994); A. and M. Kroker, *Hacking the Future: Stories for the Flesh-Eating 90s* (Montreal: New World Perspectives, 1996); A. Kroker and M. Kroker (eds.), *Digital Delirium* (Montreal: New World Perspectives, 1997).

3 See Luce Irigaray, *Speculum of the Other Woman*, trans. G.C. Gill (New York: Cornell UP, 1985).

4 Further discussions on feminism and the body can be found in: *Body Invaders* (see note 2); A. Kroker and M. Kroker (eds.), *The Hysterical Male: New Feminist Theory* (New York: St. Martin's Press, 1991); A. Kroker and M. Kroker (eds.), *The Last Sex: Feminism and Outlaw Bodies* (New York: St. Martin's Press, 1993).

5 See Jean Baudrillard, *Symbolic Exchange and*

*Death*, trans. I. Grant (London: Sage, 1993); *Seduction*, trans. B. Singer (London: Macmillan, 1990).

6 Anthony Giddens, *The Third Way: The Renewal of Social Democracy* (Oxford: Polity, 1998).

7 On prosthetics, eugenics, and the transplant revolution see: C. Lury, *Prosthetic Culture* (London: Routledge, 1997); Critical Art Ensemble, *Flesh Machine: Cyborgs, Designer Babies, and New Eugenic Consciousness* (New York: Autonomedia, 1998); P. Virilio, *The Art of the Motor*, trans. J. Rose (Minneapolis: U of Minnesota P, 1995).

8 Paul Virilio, *Open Sky*, trans. J. Rose (London: Verso, 1997).

9 Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. B. Massumi (London: The Athlone Press, 1988).

10 Sadie Plant, *Zeros + Ones: Digital Women + The New Technoculture* (London: Fourth Estate, 1997).

11 Sue Golding (ed.), *The Eight Technologies of Otherness* (London: Routledge, 1997).

Arthur and Marilouise Kroker  
CTHEORY  
Concordia University  
1455 de Maisonneuve  
Montreal  
Canada H3G 1M8  
E-mail: ctech@alcor.concordia.ca

John Armitage  
Division of Government & Politics  
Northumberland Building  
University of Northumbria at Newcastle  
Newcastle upon Tyne  
NE1 8ST  
UK  
E-mail: john.armitage@unn.ac.uk

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Mystical explanations are considered deep. The truth is that they are not even superficial.  
*Nietzsche, The Gay Science*

## I introduction

**H**akim Bey is increasingly seen as one of the most radical political and cultural theorists writing today. An American anarchist and cultural activist, Bey is associated with the concept of ontological anarchy and the tactic of the Temporary Autonomous Zone (hereafter TAZ). Influenced by modern libertarian thinkers such as Marx, Debord, and Negri, and postmodern and poststructuralist philosophers like Lyotard, Deleuze, and Guattari, Bey's writings share theoretical affinities with those of self-styled "cybertheorists" like Manuel De Landa, Nick Land, and the "cyberfeminist" Sadie Plant.<sup>2</sup>

In this article I want to present a critique of Bey's writings. Contrary to current received wisdom, I argue that Bey's political and cultural theory is not so much intellectually radical as conservative. I suggest that his key concepts fail to appreciate the reality of what Paul Virilio calls "globalitarianism,"<sup>3</sup> and the significance of the modern state. I argue that Bey's work downplays the importance of class struggle and misappropriates much modern libertarian thought, the nature and significance of various forms of political organisation, action, and the politics of everyday life. The chief results of his neglect of the above as categories of analysis are that Bey's writings produce a problematic appreciation of contemporary political developments in cybertheory and cyberculture.

This article initially provides a short preface to the broad aims of Bey's efforts to improve our knowledge of contemporary political theory and cyberculture. Consideration is subsequently given to his core concepts of ontological anarchy and the TAZ, prior to a brief discussion of the contemporary political and cultural significance of Bey's writings. It is, then, Bey's political concepts that are to the fore in this analysis of his contribution to cyberculture. Such an analysis is necessary because it is my belief that Bey's political and cultural concepts require exegesis and critical evaluation if they are going to be usefully incorporated into cybertheory. Consequently, my critique of Bey's work focuses

john armitage

## ONTOLOGICAL ANARCHY, THE TEMPORARY AUTONOMOUS ZONE, AND THE POLITICS OF CYBERCULTURE *a critique of hakim bey*<sup>1</sup>

mainly on his "radical" conceptions of "too-Late Capitalism" and the modern state, although his situationist and autonomist-Marxian inspired analyses of social class, secret societies, and cultural methods of political organisation are also examined.<sup>4</sup> In the final section, I attempt to assess Bey's current work before concluding with a few suggestions for possible future lines of development.

## II meet hakim bey

In addition to Bey's development of ontological anarchy and the TAZ, he has also written on numerous other topics, including free-thinking religious traditions and the history of the Barbary Coast. Two key works are *Sacred Drift: Essays on the Margins of Islam* and *Pirate Utopias: Moorish Corsairs & European Renegadoes*. Published under Bey's real name, Peter Lamborn Wilson, these books represent the parallel academic development of his ontological anarchy perspective.<sup>5</sup> Bey is also currently involved in a variety of anti-authoritarian and cultural movements. For example, apart from regularly publishing work on the Internet, he routinely

## ontological anarchy

debates with anarchists and others on the WBAI-FM radio show, "The Moorish Orthodox Radio Crusade," and acts as an editorial member of the New York-based Autonomedia/Semiotext(e) publishing collective.

Bey's best known book is *T.A.Z.: The Temporary Autonomous Zone, Ontological Anarchy, Poetic Terrorism* (henceforth *T.A.Z.*).<sup>6</sup> Indeed, this volume has been seized upon by anti-authoritarian political supporters and detractors, and cybertheorist defenders and critics alike.<sup>7</sup> For it is in *T.A.Z.* that Bey most fully develops his views about ontological anarchy and the TAZ. Broadly, ontological anarchy takes the supposedly "radical" political position that both traditional individualist and socialist "anarchISM" (*sic*) are finished. Bey's principal aim, however, is not simply to begin theorising anew but to begin realising anew anarchism's potential today. It is this perspective that has made him one of the most widely read anarchist writers in the past decade, linking political theory with a vision of an alternative future. Bey's approach has been developed further in *Immediatism* and *Millennium*, and extended in several recent pieces posted on the Internet.<sup>8</sup> Unsurprisingly, Bey's critique of anarchISM is prompting other anarchists to challenge and debate his theoretical claims, albeit from different perspectives.<sup>9</sup> Bey's contributions to ontological or "Post-Anarchism-Anarchy" (*T.A.Z.* 61-64) cannot, therefore, be dismissed lightly. Yet it is the concept and political tactic of the TAZ, an idea which arises out of Bey's critique of the strategy of social revolution, that has attracted the attention of cultural movements, cyberactivists, and cybertheorists in Europe and North America, mainly because of its focus on notions such as nomadic politics, the "counter-Net," and "the Web."<sup>10</sup> But, before any political analysis or cultural critique of Bey's work can begin, we need first of all to detail the nature of ontological anarchy and the TAZ. This is the task of the next two sections.

### III ontological anarchy

Bey's ontological anarchy is a concept and an emerging movement that, like most other forms of anarchism, rejects in principle the idea of government. However, there the similarities end. For, unlike many classical anarchist thinkers, Bey main-

tains that social order is neither possible nor desirable even *without* government. Why? Because "CHAOS NEVER DIED" (*T.A.Z.* 3). Or, as he recently put it, "Both as ancient myth and as 'new science,' chaos lies at the heart of our project... From this point of view, Order appears as death, cessation, crystallisation, alien silence" (*Immediatism* 1). Ontological anarchy is thus directed against the modern state (with its frontiers, its sovereignty, its monopoly of violence, its laws, and so on) and the concept of order. Indeed, Bey insists that

no "state" can "exist" in chaos, [and] that all ontological claims are spurious except the claim of chaos [which, however, is undetermined], and therefore that governance of any sort is impossible... Any form of "order" which we have not imagined and produced directly and spontaneously in sheer "existential freedom" for our own celebratory purposes – is an illusion. (*Immediatism* 2)

Drawing, to some extent, on the Nietzschean-inspired poststructuralist writings of Deleuze and Guattari,<sup>11</sup> the progressive dynamic of Bey's ontological anarchy is aimed toward the liberation of social desire:

The only force significant enough to facilitate our act of creation seems to be desire ... – hence the only viable government is that of love, or "attraction." Civilisation merely hides from itself – behind a thin static scrim of rationality – the truth that only desire creates values. (*Immediatism* 2)

Even though ontological anarchy stands on a liberal political and philosophical substructure, particularly the separation between the state, social order, and desire, the mercurial nature of Bey's concept makes it complicated to tease out all the different strands of anarchist thought contained within it. Nonetheless, at first sight at least, ontological anarchy is somewhat distinct from classical individualist and socialist anarchism. Like the former, it stresses the absolute sovereignty of the individual:

Our actions are justified by fiat & our relations are shaped by treaties with other autarchs. We

make the law for our own domains – & the chains of the law have been broken. At present perhaps we survive as mere Pretenders – but even so we may seize a few instants, a few square feet of reality over which to impose our absolute will, our *royaume. L'état, c'est moi.* (T.A.Z. 67)

While Bey's thought is clearly founded on an extravagant form of liberal individualism, his is not an isolated viewpoint. P.M.'s *Bolo' Bolo* and Black's *Anarchy after Leftism* are current variations of it. In opposition to socialist anarchism, Bey does not condemn private property as the origin of social inequality. Nor does he assert that the common ownership of the means of production and distribution is a fundamental demand for the liberty of humankind. He has, however, characterised his ideal model as follows: "The autonomy of the individual appears to be complemented & enhanced by the movement of the group; while the effectiveness of the group seems to depend on the freedom of the individual."<sup>12</sup> It would, though, be correct to say that Bey's ontological anarchy is something of a synthesis of individualist anarchism, the libertarian socialism of Fourier, and the early Marx. However, his work is also influenced by the ideas of other classic anarchist thinkers from the eighteenth and nineteenth centuries. These range from the mutualist and federalist notions of Proudhon to the extreme individualism of Stirner, from the violent and revolutionary thought of Bakunin to the anarchist communism of Kropotkin, from American individualist anarchists like Tucker and Pearl Andrews to German libertarian philosophers such as Nietzsche and mystical anarchists like Landauer.<sup>13</sup> Ontological anarchy has also contributed significantly to the ongoing restoration of other anarchist-influenced theories and practices which first came to prominence in the New Left and counter-cultural movements in the 1960s and 1970s. The radical ideas of situationists like Debord and Vaneigem concerning the "society of the spectacle" and the "revolution of everyday life" feature prominently in Bey's work, for example, alongside concepts developed by autonomist Marxists such as Cleaver and Negri. Moreover, Bey's anarchy, building on a tradition of individualist and socialist anarchism, but inspired more by a horizontal politics of desire popularised

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by postmodernists such as Lyotard, is currently an important tendency within cyberactivism and cybertheory.<sup>14</sup>

## IV the temporary autonomous zone

Ontological anarchy is a significant trend within cyberactivism and theory in the present period because Bey's political tactic of the TAZ anticipates spontaneous uprisings of the downtrodden, cyber-activists as well as marginalised groups, in far-reaching insurrections in the course of which the state and social order would be eventually eliminated and replaced by the TAZ:

The TAZ is like an uprising which does not engage directly with the State, a guerrilla operation which liberates an area (of land, of time, of imagination) and then dissolves itself to reform elsewhere/elsewhen, *before* the State can crush it. Because the State is concerned primarily with Simulation rather than substance, the TAZ can "occupy" these areas clandestinely and carry on its festal purposes for quite a while in relative peace... Getting the TAZ started may involve tactics of violence and defense, but its greatest strength lies in its invisibility... As soon as the TAZ is named (represented, mediated), it must vanish, it *will* vanish ... only to spring up again somewhere else... The TAZ is thus the perfect tactic for an era in which the State is omnipresent and all-powerful and yet simultaneously riddled with cracks and vacancies... (T.A.Z. 101)

The TAZ – championed by Bey as "the will to power as disappearance" – thus approximates to his model of political transformation (T.A.Z. 128-32). A metamorphosis that "arises first out of a critique of Revolution, and an appreciation of the Insurrection. The former labels the latter a failure; but for us *uprising* represents a far more interesting possibility..." (T.A.Z. 102). But the TAZ is not simply pointed toward the creation of momentary, self-governing spaces. It is also directed toward the formation of "robber bands," political insurgency, the emergence of a "festal" culture, and, above all, the realisation of a nomadic, and largely clandestine, form of cultural politics (T.A.Z. 106-08). Actually, Bey seeks nothing less than

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a multi-perspectived post-ideological world-view able to move "rootlessly" from philosophy to tribal myth, from natural science to Taoism... This description covers not only all the X-class artists and intellectuals but also migrant laborers, refugees, the "homeless," tourists, the RV and mobile-home culture – also people who "travel" via the Net, but may never leave their own rooms. (*T.A.Z.* 106-07)

Some "poststructuralist anarchists" are adopting the tactic of the TAZ, or what Bey calls "guerrilla raids on consensus consciousness."<sup>15</sup> These acts of cultural sabotage against the bourgeois order are, of course, intended to hasten popular uprisings. Further, the recent development of cyberactivism on the Internet is presently leading others to develop Bey's tactic, a method which he describes as being associated with a "shadowy sort of *counter-Net*, which we will call the *Web* ... the alternate horizontal open structure of info-exchange, the non-hierarchical network" (*T.A.Z.* 108). Bey's idea is thus to transform the TAZ, via the Internet, into an insurrectionary instrument of X-class artists, intellectuals, and others in their struggles against "the outward, very real & utterly objective monster of 'too-Late Capitalism,'" the "megacorporate information state," and the spectacle, and to make TAZs, instead of permanent communal societies, the basic support structure of a new political society outside the confines of both revolutionary vanguard parties and traditional political and cultural structures.<sup>16</sup> The cybernetic uprising, as it is imagined by Bey, will, therefore,

produce situations conducive to the TAZ, [and] will parasitize the Net – but we can also conceive of this strategy as an attempt to build toward the construction of an alternative and autonomous Net, "free" and no longer parasitic, which will serve as the basis for a "new society emerging from the shell of the old." (*T.A.Z.* 113)

### V the contemporary political and cultural significance of bey's writings

Although Bey's writings on ontological anarchy and the TAZ are interesting conceptual experiments and open to tactical interpretation, it is important to

understand why his transcendental politics and cultural adventurism have struck such a deep chord within a variety of anti-authoritarian and cultural movements outside and around the Internet. There are two main reasons. The first is his increasingly endorsed suggestion that conventional anarchISM has run its course, even if there are latent possibilities within the movement itself. Bey's view is well expressed in *T.A.Z.*:

The anarchist "movement" today contains virtually no Blacks, Hispanics, Native Americans or children ... even tho *in theory* such genuinely oppressed groups stand to gain the most from any anti-authoritarian revolt. Might it be that anarchISM offers no concrete program whereby the truly deprived might fulfill ... real needs & desires?... If so, then this failure would explain not only anarchism's lack of appeal to the poor & marginal, but also the disaffection & desertions from within its own ranks. Demos, picket-lines & reprints of 19th century classics don't add up to a vital, daring conspiracy of self-liberation. If the movement is to grow rather than shrink, a lot of dead wood will have to be jettisoned & some risky ideas embraced... The potential exists. (61-62)

For Bey, such potential lies in the elaboration of "post-anarchism anarchy" – a programme based on "imaginative participation in other cultures," the scrapping of "all ideological purity," "Anti-work," attacks on the "serfdom of children," the encouragement of a samizdat network, an assault on the dominance of the 2/4 and 4/4 musical beat, the promotion of "mystical anarchism," a reaffirmation of the senses, and experiments with new political tactics, inclusive of sabotage and computer networking (*T.A.Z.* 62-63). Whatever one might think of Bey's bleak assessment of traditional anarchist theory and practice, or his ideas about post-anarchism anarchy, the fact is that such notions are increasingly popular within the anti-authoritarian movement. Indeed, it is for these very reasons that "post-leftist" anarchist comrades such as Black and detractors like Bookchin pay so much attention to his political writings. In short, Bey's anarchism is increasingly hard to ignore.

The second reason why Bey's writings are significant is that his concept of the TAZ has touched a

nerve with a number of antiauthoritarian-influenced cultural and cyber-activists. Here, though, it is Bey's argument that anyone interested in acting alongside oppressed groups in anti-authoritarian revolts should first of all abandon the revolutionary dreams of nineteenth-century social anarchism in favour of the tactic of the TAZ that has been most influential. This is because, for many activists, old-style anarchISM is hopelessly out of date and largely inadequate as a form of resistance. Consequently, a number of them have now begun to adopt a decentralised and temporary form of nomadic micro-politics based on alternative electronic networking, immediacy, and the regeneration of everyday life.

Thus it is through ontological anarchy and the TAZ that Bey's writings are now exercising their growing influence on political and cultural movements ranging across anarchism, cultural activism, and cyberactivism. In a recent interview with Bey, for instance, Steve Beard suggests that Bey's "views on the politics of drugs and dancing are as vital as those of Timothy Leary and Terence McKenna."<sup>17</sup> Moreover, the apparent magnetism of Bey's works seems as pronounced in the United States as it is in Europe, where, today, a number of cyberactivists are attempting to carry through their understanding of "cyberrevolution." As one cyberactivist writes:

I've read *Immediatism* a couple of times. ... I find it hard to read because it's so exciting. I keep wanting to relate it to my own experience. I think like all good theories, it has generalizations and applications beyond the scope of the originator (as Einstein was surprised to find out that some of his theories predicted Brownian motion).<sup>18</sup>

However, since the rise of the TAZ, Bey's anarchy has enjoyed considerable influence on the conspicuous resurgence of anarchist ideas and debates within – for want of a better term – contemporary "cybercultural studies." His writings appear in numerous recent cyberculture collections and are referenced in a variety of related works.<sup>19</sup> For example, according to Lemos, the French Minitel videotext system has now become a

"temporary autonomous zone" ... a virtual space which is "self-organizing" ... a sort of plateau, a "rhizome" where the interconnec-

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tions and multiplicities even change the nature of the media such that it metamorphoses into a medium of contact... On this plateau, users are virtual nomads, phantoms who circulate in the structures of the labyrinth.<sup>20</sup>

Today, therefore, Bey's ontological anarchy, employing a varied tradition of modern, postmodern, and poststructuralist anarchism, but stimulated further by the tactic of the TAZ disseminated by Bey himself, is a symptomatic trend within anti-authoritarian and cultural movements as well as within cybertheory. But the question that never seems to be asked is, how useful *are* ontological anarchy and the TAZ as political tools of cybercultural analysis and tactics? This question lies at the heart of the following sections.

## VI a critique of hakim bey

Bey's ontological anarchy and the tactic of the TAZ are, in my estimation, significant enough to require critique. Consequently, in this section, I pay particular attention to his conceptions of radical theory, too-Late Capitalism, the megacorporate information state, class struggle, political organisation, and the revolution of everyday life.

### i. hakim bey: radical theorist?

Broadly, I regard Bey's writings as the work of an independent but limited political theorist and cultural activist. This is because, despite their rather flamboyant and radical-sounding rhetoric, Bey's writings are actually combined with an intellectually conservative attitude to cultural politics. Thus, while the ubiquitous Luther Blissett has wryly described Bey's literary style as "one part Hippie bullshit and cheap oriental trinkets, one part post-Structuralism and pithy intricacies, and one part cybercrap," a more telling example of Bey's political obscurantism at the cultural level is provided by "RADICAL ARISTOCRATISM," one of Bey's numerous "Slogans & Mottos for Subway Graffiti & Other Purposes."<sup>21</sup> For, as Richard Barbrook has correctly noted, in instances like this, Bey's

desire to become a Nietzschean Superman rapidly turns into unashamed support for reactionary political positions. For instance, Bey claims that the seizure of the Croatian city of

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Fiume by D'Annunzio's supporters in 1919 was a forerunner of contemporary "Temporary Autonomous Zones." ... Yet, the Fiume incident not only pioneered the style and ideology of Italian fascism, but also led directly to the imposition of totalitarianism on Italy.<sup>22</sup>

### ii. too-late capitalism?

Further, as an archaic and elitist political trend within a variety of contemporary cultural movements, Bey's work exhibits little more than what Nietzsche called the *ressentiment* of those seeking revenge, under the banner of justice, against the advance of what Bey dubs "too-Late Capitalism."<sup>23</sup> For any cursory reading of Bey's main texts would not only reveal a highly romantic protest in defiance of too-Late Capitalism but a complete absence of definition or analysis of it. In fact, a remarkable feature of Bey's work is how rarely, at least until recently, the concept of too-late, or any other kind of capitalism, appears in it. Unfortunately, when it does, it does so mostly as *ressentiment* transformed into mystification. However, it is not the fact that Bey blames the "sign of Capital" for the "sorrows of alienation" that irks at least this reader. It is the fact that he proposes to challenge it with hocus-pocus like the following: "The blind panopticon of Capital remains, after all, most vulnerable in the realm of 'magic'" (*Millennium* 49). Fundamentally, then, Bey's deeply mystical writings are less concerned with cybercultural movements that are seeking to challenge too-Late Capitalism than they are with conjuring up romantic images of it. Actually, what Bey's work cannot truly acknowledge is the rise of what Virilio has christened "globalitarianism": a specific, historical, economic, technological, and social system, based – in the contemporary era – on the increasingly centralised ownership and control of the means of production by media monoliths like Microsoft or WorldCom. As Virilio recently commented,

now, through the single market, through globalization, through the convergence of time towards a single time, a world time, a time which comes to dominate local time and the stuff of history, what emerges – through cyberspace, through the big telecommunications

conglomerates – is a new totalitarianism, a totalitarianism of totalitarianism, and this is what I call globalitarianism. It is the totalitarianism of all totalities.<sup>24</sup>

### iii. refusing the megacorporate information state?

Equally unconvincing is Bey's chaos-inspired outcry against the megacorporate information state which secures the interests of the conventional social order. However, it must be remembered that Bey regards his works as a catalyst of social desire and imagines *himself* as the avatar of the state. Consequently, Bey's outrage at the claims of the state and social order does not manifest itself as a rejection of, say, the actual megacorporate-driven policies of the US state regarding the "Information Superhighway" and the new cybernetic order. Rather, it establishes itself as an individualistic refusal of the mediated image of the state; the state as "spectacle," the state as "simulation," the state as personified by "Cop culture" on the television screen. But Bey's attacks on the state are, in truth, attacks on *pictures* of the state. For, in his writings, the state apparatus has been transformed into nothing more threatening than a television programme like *Hill Street Blues*.<sup>25</sup> This also explains why, for Bey, there is little point in "confronting a 'power' which has lost all meaning and become sheer Simulation" (*T.A.Z.* 128). Indeed, the modern state is "increasingly irrelevant as a focus of opposition" (*Millennium* 45).

The problem with Bey's profoundly metaphysical and individualistic account of the state is that the actions of the majority of the world's population are, in fact, carried out in the shadow of regimes that guarantee the preoccupations of the globalitarian elites, or what Kroker and Weinstein call "the virtual class."<sup>26</sup> Given such circumstances, one does have to ask how politically useful it is to focus all one's intellectual and cultural energies on the analysis of social desire and the portrayal of oneself as the incarnation of *l'état*.

For the sake of argument, let us consider the Zapatistas – everyone's favourite example of cybernetic struggle.<sup>27</sup> I think it is safe to say that, in their rebellion against a particular set of domestic state policies in Chiapas, Mexico, the Zapatistas are



currently resisting – sometimes via the Internet – the confiscation of their land and the attempt to control their indigenous affairs by the virtual class. However, while the struggle of the Zapatistas may well be connected to their social desire for autonomy, it has very little to do with Bey's individualistic longing for corporeal autarchy. This is because the Zapatista rebellion is being conducted against the physical Mexican state, and not against the virtual image of the Mexican state (although this is certainly part of the struggle, since until recently the ruling party totally controlled the domestic media, if not the Internet). Additionally, the Zapatistas are not facing a "power" that has lost all meaning. Far from it. It is a power which is brimfull of meaning, the meaning of virtual class warfare. The Zapatistas, then, do not see the Mexican state, or its army of occupation and infiltration, as increasingly irrelevant in terms of political opposition. How could they when they are fighting for recognition and autonomy within the framework of the Mexican nation-state itself? As the leader of the Zapatistas, Sub-Commandant Marcos, has recently stated:

The Zapatistas ... think that it is necessary to defend the nation state in the face of globalisation, and that the attempts to break Mexico into fragments are being made by the government, and not by the just demands of the Indian peoples for autonomy.<sup>28</sup>

#### *iv. the denial of class struggle: from the taz to the tong?*

Bey's anarchy also refuses – at least until recently – what is crucial not only in the cybercultural struggles to resist the development of globalitarianism but also for the liberty of cultural movements, cyberactivists, and even cybertheorists: the reassertion of autonomous revolutionary proletarian subjectivity beyond the restrictions of a vanguard party, bringing about the regeneration, not the elimination, of everyday life. Naturally, Bey gives "unqualified support to all indigenous peoples in their struggle for complete autonomy" (*T.A.Z.* 46). But what does he have to say about his, and perhaps our own, political ambitions? Bey suggests that "We could pick up on the struggle where it was dropped by Situationism in '68 & Autonomia in the seventies &

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carry it to the next stage" (*T.A.Z.* 62). Obviously, such notions depend on who "we" are and how "we" relate to situationism and autonomist Marxism, and on what the next stage is envisaged to be. This is an important point because most of Bey's discussions of political action do not appear to anticipate class struggle at all, let alone the reassertion of proletarian subjectivity. Rather, they focus on the activities of individuals, or, at best, marginal groups and "especially ones whose jouissance involves illegalism (potheads, sex heretics, insurrectionists) or extreme eccentricity (nudists, pagans, post-avant-garde artists, etc., etc.)" (*Immediatism* 13). The question is, how does the average pothead's struggle relate to the political and cultural projects of situationism and autonomist Marxism? Certainly, it is hard to imagine anyone being able to carry through either the revolution of everyday life begun by the situationists or autonomist Marxism's efforts to reassert proletarian subjectivity without recognising the centrality of Marxian-influenced concepts such as class struggle. Yet this is precisely what Bey attempts. Indeed, I would suggest that Bey's work is, for the most part, not much more than situationism and autonomist Marxism shorn of their Marxian heritage. Surely there can be few doubts in the mind of anyone who has actually read (as opposed to read *about*) Debord, Vaneigem, Cleaver, and Negri, that Marx's conception of class struggle is central to their various programmes? But, given our "postmodern" times, fewer and fewer people appear to be aware of this.<sup>29</sup> As Michael Löwy mockingly commented about the self-styled "leader" of the situationists – and much the same could be said of Negri in the present tense:

It may be a truism, but these days it has to be pointed out with some force: *Guy Debord was a Marxist*. A profoundly heretical Marxist, no doubt, but also a profoundly innovative one. He was open to libertarian insights, but he still claimed to be a Marxist.<sup>30</sup>

Like Bey, many radical political theorists and cultural activists also wish to see political action undertaken outside the organisational and hierarchical constraints of vanguard or even social democratic political parties. But here too – and in complete contrast to situationism and autonomist Marxism – Bey has provided at least two accounts

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of political organisation that do not envisage the involvement of social classes in political action. In *T.A.Z.*, for example, the main form of political organisation offered was the “will to power as disappearance.” The tactic of the TAZ does not, of course, involve formal organisation since it is predicated upon individuals participating in spontaneous uprisings in social and cyber- space. What Bey calls “Immediatism,” however, does involve political organisation since it is founded on marginal groups participating in a Chinese-style Tong. Here Bey argues that “secret societies are once again a valid possibility for groups seeking autonomy & individual realization” (*Immediatism* 13-17). The political and organisational advantages of the Tong are, according to Bey, that it can be “choosy” about its members. Soon, though, the Tong will

want to become a horizontal network of such autonomous groups – then, a “tendency” – then, a “movement” – then, a kinetic web of “temporary autonomous zones.” At last it will strive to become the kernel of a new society giving birth to itself within the corrupt shell of the old. (*Immediatism* 17)

Bey’s advocacy of the Tong and secret societies highlights the absences in his version of political organisation and exposes his contempt for proletarian subjectivity. For his form of political organisation and resistance is strictly a private affair. To be sure, Bey’s description of the Tong, with its secrets and signs, sounds remarkably similar to a description of freemasonry.<sup>31</sup> Thus, Bey’s cybernetic uprising will not only not be televised, it will not even be posted on the Internet. Unless, that is, one is privileged to receive an e-mail from “the Bey,” from the prince himself.<sup>32</sup> But how does the Tong square with Bey’s self-professed support of the situationists’ revolution of everyday life or autonomous Marxism’s attempts to encourage the reassertion of proletarian subjectivity? It doesn’t. The situationists, for instance, were in no doubt as to the mode of their preferred form of political organisation. The road for cultural and other workers was crystal clear. It would involve “the formation of *councillist* organizations of revolutionary workers federating with others on the sole basis of total democracy and total critique.”<sup>33</sup> Bey, however, is unconcerned with workers’ councils because he is unconcerned with

cultural or any other kind of workers. Nor is he concerned with furthering autonomous Marxism’s endeavours, despite the fact that autonomous Marxists explicitly rule out handing over proletarian power to a vanguard party. Why is this? After all, autonomists, like Bey, are seeking to achieve unity amongst a large number of – often marginal – groups whose collective interest is the destruction of the social factory and capitalist homogeneity, as well as the reclamation of everyday life and individual subjectivity. The answer to this question is plain. The struggles of autonomist Marxists are directed not at the “sign of capital” but at the materiality of capital. Moreover, for Bey to recognise the actuality of capitalism would involve him recognising the reality of class struggle and the necessary relationship between the latter and political forms of resistance that do not correspond to secret societies.

### v. revolutionising everyday life?

Finally, all that we are offered by Bey in terms of the cultural regeneration of everyday life is “Poetic Terrorism” – “WEIRD DANCING IN ALL-NIGHT computer-banking lobbies” (*T.A.Z.* 4) – and “Art Sabotage”:

Art Sabotage is the dark side of Poetic Terrorism – creation through destruction – but it cannot serve any Party, nor any nihilism, nor even art itself. Just as the banishment of illusion enhances awareness, so the demolition of aesthetic blight sweetens the world of the air of discourse, of the Other. Art Sabotage serves only consciousness, attentiveness, awakens. (*T.A.Z.* 11)

Again, though, it is the denial of the role of social classes in political and cultural action and organisation that dominates Bey’s writings. Indeed, his revolutionaries of everyday life, poetic terrorists if you will, are actually rather solitary figures. For they not only dance alone in the micro-spaces of globalitarian finance capital but commit acts of art sabotage in the name of nothing but an inner dialogue with themselves.

### VII beyond the temporary autonomous zone?

No doubt Bey’s ontological anarchy and the tactic

of the TAZ will endure my critique, especially given the significance attached to these concepts by Bey's growing number of political supporters within contemporary cybercultural movements and scholarship. However, and even though Bey's earlier writings remain a current source of inspiration for those seeking a critique of anarchIST theory and practice, the fact is that his most recent works have moved on from the positions adopted in *T.A.Z.* and *Immediatism*. This shift does not entail the abandonment of obscurantism and *ressentiment* or the endorsement of a more meaningful conception of globalitarianism and the modern state. Bey still takes issue with most other anarchISTS about the essence of the state, its association with social order, the Internet, and how the society of the spectacle can be overcome in a world that presently contains not only an ascendant virtual class but also an autonomous Zapatista rebellion against the Mexican state and the now wholly reified "forces of globalization."

Nevertheless, Bey has changed his theoretical position regarding political and cultural struggles. Furthermore, he seems to have discovered what everyone else who is serious about radical political change knew all along, namely that "From a certain viewpoint the force of presence or solidarity arises from the reality of 'class'" (*Millennium* 47). Although Bey can't yet bring himself to write class without quotation marks, this move does at least arise from his belated acceptance that any revolutionary insurgency will involve class struggle. Bey's new position is a welcome development. It also represents an advance on his earlier, almost exclusive, emphasis on the struggles of individuals and marginal groups. Thus, Bey's tentative turn to class analysis links his present work to those currently associated with "post-situationism" and autonomous Marxism.<sup>34</sup> As he himself notes, "We need to re-read Proudhon, Marx, Nietzsche, the IWW, etc. – the way the EZLN reads Zapata!" (*Millennium* 45).

The problem is that, in altering his position on the question of class and re-reading Marx, Bey has also had to alter his position on questions of political organisation and action. Consequently, in *Millennium* both individuals and marginal groups, along with the tactics of the TAZ and the Tong, have all but disappeared. In their place Bey proposes a third form of political organisation.

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However, the one chosen is not generally based on individuals or marginal groups but on old-style classes, and, more importantly, was directed at the physical form of capital in the early part of this century. For Bey's new tactic is, in fact, an *old strategy*: the strategy of anarcho-syndicalism, fused, in this case, with Colonel Qaddafi's Islamic revolution and Sufism (*Millennium* 43-44). Now, as far as I understand the secular version of anarcho-syndicalism, it involves organising labour unions into revolutionary units of the working class in its struggle with capitalism, and makes unions, not individual nomads or Tongs, the basic units of a new socialist order, once the "General Strike" has served its purpose as the catalyst of revolution. Why is this new/old strategy required? Because, according to Bey, "beyond the temporary autonomous zone, beyond the insurrection, there is the necessary revolution, the jihad" (*Millennium* 30). Briefly, what Bey is currently suggesting as a response to globalitarianism and the violence of the modern state is a return to syndicalism as a form of political organisation, a form which reached its heyday around 1937 in the midst of the Spanish Civil War and has not been heard of much since, until now. But surely all Bey's discussions about capital, class solidarity, political strategies, unions, general strikes, and even revolution can only mean one thing: *dreamtime is over – the political tactics of the TAZ and the Tong are dead*. Whether situationism, autonomous Marxism, and anarcho-syndicalism are still alive is, no doubt, also open to debate.<sup>35</sup>

Of course, along with its discovery of class and its endorsement of anarcho-syndicalism, *Millennium* also provides us with an update on the revolution of everyday life, poetic terrorism, and art sabotage:

Against the negative hermetism of the one world and its sham carnality, opposition proposes a gnosis of its own, a dialogics of presence, the pleasure of overcoming the representation of pleasure – a kind of touchstone. Not censorship, not management of the image, but the reverse – the liberation of the imagination from the empire of the image, from its overbearing omnipresence and singularity. The image alone is tasteless, like a bioindustrial tomato or pear – odorless as civilization itself, our "society of safety," our culture of mere

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survival. Ours is partly a struggle against colonial hearing & imperial gaze, and for smell, touch, taste – and for the “third eye.” (33)

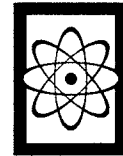
Here, however, and unlike in *T.A.Z.* or *Immediatism*, Bey can no longer refuse the part of classes in cultural politics. For the jihad not only involves social opposition to sameness, separation, censorship, and the management of the image but a *shared* struggle for difference, presence, and the liberation of the collective imagination.

## VIII conclusion

In conclusion, Bey's ontological anarchy and the tactic of the TAZ present a variety of difficulties for cyberactivism and cybertheory. Bey's political and cultural obscurantism, together with his *ressentiment* toward the new globalitarian order, not only evades the question of the modern state but, until very recently, has actively sought to avoid any discussion of virtual class struggle in the manner of the Zapatistas, the situationists, and autonomous Marxists. Much the same can be said of his relationship to political action, organisation, and the politics of everyday life. Here, too, the principal political themes have been the refusal of social class in favour of the espousal of, first, individuals and secret societies, and, second, anarcho-syndicalism. However, the only conclusion that can be drawn from this particular cybernaut's passage through a rather brief period of time is that the utopian moment of the TAZ has passed – both for him and for us – and that the new radical politics of cyberculture will, of necessity, have to recognise that the overwhelming force of presence or solidarity really does arise from the reality of class.

The implications of such a conclusion are numerous, fraught with difficulties, and tentative. It should be clear by now that ontological anarchy and the tactic of the TAZ properly belong to the pre-history of cyberactivism and cybertheory. Even Bey himself has all but abandoned these concepts. It is time that cyberactivists and cybertheorists did likewise. It is, though, a pity that Bey still insists on retaining his penchant for obscurantism and *ressentiment*. For what is required above all is not a romantic notion of too-Late Capitalism but a serious theoretical analysis and comprehension of globalitarianism – the extension of the spatial and temporal logic of cyber-

netic finance capital into all areas of social and cultural life – or, in short, an analysis of cybersociety. Nor can such an analysis afford to treat as irrelevant the military-industrial complex that brought us the information superhighway and, along its vectors, cybernetic warfare and the speeding juggernauts of the virtual class.<sup>36</sup> The political and cultural struggles of the Zapatistas demonstrate that resistance, autonomy, federation, and revolution are all possible outside the prison house of the political party. But what no one has yet demonstrated – inclusive of Bey – is how such high-tech struggles can be theorised, organised, and realised *without* the participation of the new class-based movements of workers, women, antiracists, greens, peace activists, and so on.<sup>37</sup> It is inconceivable that individuals, secret societies, and, I would argue, anarcho-syndicalists, could ever theorise or realise such struggles on their own – with or without the use of the Internet. Lastly, therefore, any future cybernetic revolution of everyday life will not depend on poetic terrorism, art sabotage, or even the jihad. But neither will it depend on the negation of class in political and cultural organisation. It will rely, for the most part, on the actions of collective subjects.



## notes

1 I would like to thank Richard Barbrook at the Hypermedia Centre, University of Westminster, Alastair Bonnett at the University of Newcastle, Mark Little at the University of Northumbria, and Pauline Van Mourik Broekman of *Mute* magazine for their comments on this article. A much earlier version, “Ontological Anarchism, The Temporary Autonomous Zone, and Techno-Politics: An Analysis and Critique of Hakim Bey” was presented at the Fourth International Conference on Alternative Futures and Popular Protest, 15-17 April 1998, at The Manchester Metropolitan University, UK. It can be found in the *Conference Papers Volume 1*, edited by Colin Barker and Mike Tynesley, and published by The Manchester Metropolitan University. This final version was presented at the Exploring Cyber Society conference, 5-7 July 1999, at the University of Northumbria at Newcastle, Newcastle upon Tyne, UK.

2 For an excellent overview of libertarian political

thought, and the anarchist tradition more generally, see Marshall 1993. On poststructuralism and postmodernism, Sarup 1988 is still one of the clearest expositions for the uninitiated. There are numerous websites devoted to Bey. See, for example, the Hakim Bey archive. It can be accessed at: <http://www.t0.or.at/hakimbey/obelisk.htm>. The terms "cybertheory," "cyberfeminism," and "cyberculture" are, of course, derived from cybernetics, a form of inquiry centred on the analysis of communication and feedback loops or systems in humans, animals, and machines. See Wiener (1948) for the original source. The most recent manifestation of cybertheory, containing pieces by Bey, De Landa, Land, and Plant, is Broadhurst-Dixon and Cassidy 1998. On cyberfeminism see Plant 1997.

3 Virilio's concept of globalitarianism is taken from my interview with him: "From Modernism to Hypermodernism and Beyond: An Interview with Paul Virilio" (Virilio and Armitage 1999).

4 Situationism came to prominence in the Parisian uprisings of May 1968. The leading situationists were the Surrealist-, Dadaist-, and Marxian-influenced Guy Debord, Raoul Vaneigem, and Asger Jorn. Briefly, the centrepiece of situationism was not so much the concepts of Marxian political economy and social revolution as Debord's critique of "the spectacle" (alienated imagery) and Vaneigem's advocacy of the "revolution of everyday life" (the transformation of cultural life through creativity, spontaneity, poetry, self-realisation, communication, and participation). Debord 1983 and Vaneigem 1994 are often considered situationist classics.

Autonomist Marxism originated in Italy during the 1970s. It is concerned with the reassertion of proletarian subjectivity and the rejection of classical Marxian critical theory, particularly as expressed in the writings of Theodor Adorno and Max Horkheimer. Autonomists are opposed to Soviet Marxism. Specifically, autonomists reject the need for a vanguard political party. However, while they retain Marx's notion of class struggle, autonomists principally rely on the *Grundrisse* rather than *Capital* for their analyses. Autonomists have tended to see their discussions of the capitalist "social factory" and "homogenisation" as crucial to any explanation of the origins of modern

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misery. In short, the aim of autonomist Marxism is not only to promote proletarian unity but to negate the power of capital from below through work slowdowns, subversion, and the direct assertion of individual subjectivity. Key autonomist Marxist references are Negri 1984 and Cleaver 1979.

5 For another example of Bey's writings under his real name, see, for instance, Lamborn Wilson 1996.

6 See Hakim Bey, *T.A.Z.: The Temporary Autonomous Zone, Ontological Anarchy, Poetic Terrorism*. All references in this article are to the Autonomedia edition.

7 For instance, while Bey is supported by Shields (1996) and Black (1997), he is critically discussed by Blissett (1996) and Birrell (1997).

8 All references in this article are, respectively, to the AK Press (1994) and the Autonomedia & Garden of Delight (1996) editions of *Immediatism* and *Millennium*. For Bey's recent pieces posted on the Internet see 1997a, 1997b, and 1997c, as well as Wilson 1997.

9 For example, Bookchin 1995 contains a brutal but crude critique of Bey. Alternatively, Black 1997 is a book-length response to Bookchin's critique of "lifestyle anarchism" that, generally, supports Bey's position.

10 Bey's writings regularly appear on closed moderated mailing lists for Net criticism such as *nettime*, based in Amsterdam, or in the Canadian electronic journal of theory, technology, and culture, *Ctheory* ([www.ctheory.com](http://www.ctheory.com)).

11 See, for instance, Gilles Deleuze and Félix Guattari's *Anti-Oedipus: Capitalism and Schizophrenia* and their *A Thousand Plateaus: Capitalism and Schizophrenia*.

12 See Bey's "The Lemonade Ocean & Modern Times: A Position Paper by Hakim Bey."

13 Marshall (1993) discusses most of the writers mentioned in this paragraph. See note 2.

14 Lyotard's *Driftworks* is usually seen as a key work in this context.

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15 For a detailed exposition of poststructuralist anarchism, see May 1995. The quotation in this sentence is taken from Bey's recent Internet article, "The Obelisk."

16 The quotations in this sentence are taken, respectively, from *Immediatism* (19) and *T.A.Z.* (100).

17 See Beard 1995.

18 McGuff 1997.

19 See, for instance, Atton 1996. Apart from the Broadhurst-Dixon and Cassidy collection (1998), Bey's writings also appear in Aronowitz et al. 1996, Drucker 1996, and Kroker and Kroker 1997. McKay (1996) also utilises Bey's work.

20 Lemos 1996.

21 See Blissett 1996. The term "RADICAL ARISTOCRATISM" can be found on page 28 of *T.A.Z.*

22 See Barbrook 1998.

23 *Ressentiment* is a concept first developed by Nietzsche, particularly in *The Will to Power*. Nietzsche uses it to mean the feelings of rivalry or envy directed towards the ruling classes, groups, or religious authorities. Bey uses the term "too-Late Capitalism" in *Immediatism* (19).

24 See note 3.

25 See Bey's "Resolution for the 1990s; Boycott Cop Culture!!!" in *T.A.Z.* (90-93).

26 Kroker and Weinstein (1994) give the following definition of the virtual class:

The social strata in contemporary pan-capitalism that have material and ideological interest in speeding-up and intensifying the process of virtualisation and heightening the will to virtuality. The elite components of this class include technotopians who explicitly advance the cause of virtualization through offering a utopia of juvenile power (virtual reality flight simulators in all the entertainment complexes), and cynical capitalists who exploit virtuality for profit. (163)

27 See, for example, Castells 1997 and Cleaver 1997.

28 Marcos 1997: 10.

29 On the legacy of situationism and its impact on postmodernism, see Bonnett 1996.

30 See Löwy 1998: 31.

31 Thanks to Mark Little for this point.

32 "Bey" is a Turkish word that is often translated into English as "prince."

33 See Situationist International 1981: 253, emphasis in original.

34 Post-situationism is a term that is used by a variety of authors; see, for example, Black 1997: 40.

35 Unfortunately, this is not the place for any such debate. However, even Bey's supporters like the self-proclaimed post-situationist and vehement anti-Marxist Black, believe that anarcho-syndicalism is obsolete. See Black 1997: 149.

36 On this see, for instance, Armitage 1999.

37 See Witheford 1997 for a first-rate analysis of these issues.

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John Armitage  
Division of Government & Politics  
Northumberland Building  
University of Northumbria at Newcastle  
Newcastle upon Tyne NE1 8ST  
UK  
E-mail: john.armitage@unn.ac.uk



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# Paul Virilio

## An Introduction

*John Armitage*

This is a war universe. War all the time. That is its nature. There may be other universes based on all sorts of other principles, but ours seems to be based on war. . . .

(Burroughs, 1991: 95)

People often tell me: you reason in a political way, like the Ancients. It's true. I don't believe in sociology. It's a mask. Sociology was invented in order to forget politics. For me, all that is social, sociology, doesn't interest me. I prefer politics and war.

(Virilio and Lotringer, 1997: 17)

**S**ELF-PROFESSED 'urbanist', political thinker and 'critic of the art of technology', Paul Virilio is one of the most significant and stimulating French cultural theorists writing today. Increasingly hailed as the inventor of military, spatial, political and 'technocultural' concepts such as the 'oblique function', 'dromology', or the 'science' of speed, the 'aesthetics of disappearance' and 'endo-colonization', Virilio is noted for his proclamation that the logic of ever increasing speed lies at the heart of the organization and transformation of the contemporary world.

Challenging accepted modern and postmodern theories of war, architecture, politics and technoculture, Virilio's phenomenological critique of speed draws on the continental philosophy of Husserl (1964) and Merleau-Ponty (1962), together with the gestalt psychology of forms.<sup>1</sup> Partially converging with the poststructuralist theories of Foucault (1977) and Deleuze and Guattari (1987), Virilio's writings are particularly influenced by war, strategy and spatial planning. Sharing common ground with other contemporary 'hypermodern' cultural theorists like Wark (1994), Kittler

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■ *Theory, Culture & Society* 1999 (SAGE, London, Thousand Oaks and New Delhi), Vol. 16(5-6): 1-23  
[0263-2764(199910/12)16:5-6;1-23;009956]

(1997), and Kroker and Kroker (1997), Virilio rejects the 'catastrophe' of postmodernism, describing his own main texts such as *Speed & Politics: An Essay on Dromology* (1986), *War and Cinema: The Logistics of Perception* (1989) and, most recently, *Politics of the Very Worst* (Virilio and Petit, 1999), as a modest contribution to the 'archeology of the future'.<sup>2</sup>

But who is Paul Virilio? What is the significance of military space, the organization territory, dromology, disappearance, the 'logistics of perception', 'polar inertia', the 'transplant revolution' and 'technological fundamentalism'? What are the principal architectural, political and aesthetic themes and contributions of Virilio's important dromological and hypermodern writings on the archeology of the future? In this Introduction to *Paul Virilio: From Modernism to Hypermodernism and Beyond*, such questions are briefly addressed in the first two sections through the provision of Virilio's biographical details, theoretical development and contributions to cultural theory. In the following three sections, an outline of Virilio's hypermodernism, the 'war machine', the 'flesh machine', and a short evaluation of the salient propositions and controversies surrounding Virilio's work will be provided prior to the conclusion and, finally, an overview of the contents of this collection.<sup>3</sup>

### **Military Space and the Organization of Territory**

Born in Paris of a French mother and an Italian father in 1932, Virilio was evacuated to the port of Nantes in Brittany in 1939 where he was traumatized by the drama of the *Blitzkrieg* during the Second World War. After the war, he attended L'École des Métiers d'Art in Paris before becoming a craftsman in stained glass and working in churches alongside artists such as Matisse. In 1950, Virilio converted to Christianity in the fraternity of 'worker-priests' – radical clerics who shun religious dress, take an industrial job and live among the workers. Later, after being conscripted into the colonial army during the Algerian war of independence (1954–62), Virilio began campaigning with Abbé Pierre, the post-war patron of the homeless.<sup>4</sup> In the late 1950s Virilio studied phenomenology with Merleau-Ponty at the Sorbonne before turning to existential, political and aesthetic questions involving the architecture of war from the radical political standpoint of an 'anarcho-Christian'. With the architect Claude Parent, he instituted the *Architecture Principe* group and the review of the same name in 1963. However, as Virilio relates to Armitage in the interview in this collection – hereafter, 'the hypermodern interview' – an irreversible split with Parent ensued after Virilio's anarchist- and situationist-inspired political activities during the *événements* of May 1968. In 1969, Virilio was nominated Professor at the École Speciale d'Architecture in Paris, becoming its Director in 1975 and its President in 1990. An experienced organizer of exhibitions on the themes of war, architecture, media and democracy, Virilio has also been a member of the editorial board and a contributor to a variety of influential periodicals, including *Critique*, *Traverses*, *Cahiers du Cinéma* and *Le Monde Diplomatique*. Awarded the coveted 'National Award for

Criticism' in 1987, Virilio's political activities currently involve, among others, active participation in various associations concerned with the housing of the homeless in Paris.

According to Virilio, in a culture overshadowed by war, the military is of critical significance in questions concerning the construction of urban and political space and the technological organization of social existence. As he amply demonstrates in *Speed & Politics* (1986) and in his contribution to this collection, Virilio presents a convincing 'war model' of the evolution of the modern city and the development of cultural and social life using such proposals. The fortified city of the feudal era, for example, was a stationary and largely impregnable war machine connected in Virilio's understanding to an effort to regulate the flow and the speed of the movements of the urban population. Consequently, the fortified city was a political space of habitation, the political form, and the material foundation of feudalism. However, for Virilio, the fortified city of feudalism disappeared because of the arrival of exceptionally mobile and high-speed weapons systems. Such developments not only 'exposed' the city and turned siege warfare into a war of movement but also destroyed the attempts to regulate the population and thus ushered in the free movement of the urban masses. Virilio therefore conceives of the transition from feudalism to capitalism not in economic but in military, spatial, political and technological terms. It is, in short, the military conception of history.

Beginning in 1958 with a critical analysis of military space and the organization of territory, particularly regarding the 'Atlantic Wall' – the 15,000 German bunkers constructed during the Second World War along the coastline of France to prevent an Allied invasion – Virilio developed his research within the *Architecture Principe* group review and through a phenomenologically and gestalt-based theory of the oblique function – a theory that resulted in the erection of a 'bunker church' in Nevers in 1966 and the Thomson-Houston aerospace research centre in Villacoubly in 1969. In the 1970s, Virilio argued that the militarization of urban space was leading to the 'deterritorialization' of the modern city under the sign of speed, or 'chronopolitics'. Outlining the alarming 'dromological' consequences of the technological revolution in transportation and information transmission, Virilio set out to examine the possibilities for 'revolutionary resistance' to 'pure power' and began investigating the relationship between military technologies, the organization of space, culture and society. As a result, throughout the 1980s, Virilio developed the next major phase of his work via aesthetically based conceptions of 'disappearance', 'fractalization', 'pure war', urban space, cinema, logistics, automation, and what I shall call 'pure perception'. Nevertheless, since the early 1990s, Virilio has reflected upon the revolutionary socio-cultural consequences of the deployment of remote-controlled and cybernetic technologies in the city, the Persian Gulf War, and the new information and communications media of hypermodern societies. Focusing on polar inertia, the transplant revolution, technoscience and cybernetic performance art, his post-Einsteinian cultural

theory is presently concerned with the invasion of the human body by hypermodern technoscience, or endo-colonization, 'cyberfeminism' and what Virilio calls 'technological fundamentalism'.

### **The Dromocratic Condition: A Report on Speed**

As the articles by Leach on Virilio's architecture and Gane on Virilio's 'bunker theory' in this collection indicate, Virilio's early essays on the oblique function – a proposed new urban order based on 'the end of the vertical as an axis of elevation, the end of the horizontal as permanent plane, in favour of the oblique axis and the inclined plane' – were published in the mid-1960s in *Architecture Principe* (Johnson, 1996; Virilio and Parent, 1996: v). They foreshadowed his military and political critiques of deterritorialization that surfaced in *Bunker Archeology* (1994a) and *L'Insécurité du territoire* (1976). Virilio's phenomenology, like Merleau-Ponty's, was not so much influenced by the philosophies of structuralism, poststructuralism and postmodernism but, rather, merged with them at various points. In consequence, Merleau-Ponty's emphasis on the corporeal dimensions of human existence in terms of the 'situated' 'body-subject' and 'expressive' 'inter-subjectivity' encouraged Virilio to declare 'the total reinvention of architectural vocabulary', and the 'third spatial possibility of architecture' (Virilio and Parent, 1996: v).

Virilio's scepticism concerning the political economy of wealth is sustained by his 'dromocratic' conception of politics, revolution and historical progress in 'dromocratic society'. Nonetheless, his writings on chronopolitics have also been decisively swayed by Sun Tzu's (1993) theory of war and Virilio's long-running debate with himself about the 'positive' (Fascist) and 'negative' (anti-Fascist) political and technological aspects of Marinetti's artistic theory of Futurism (see e.g. Tisdall and Bozzolla, 1977; Virilio and Lotringer, 1997: 45). For Sun Tzu and Marinetti, political economy cannot be subsumed under the political economy of wealth, with an understanding of the management of the economy of the state being its general aim. On the contrary, the histories of socio-political institutions like the military, and cultural movements such as Futurism, demonstrate that war and the need for speed rather than commerce and the urge for wealth were the foundation stones of the city, culture and society. In the present period, then, Virilio insists that politics must be presumed to have a relationship to speed that is equal in importance to its relationship to wealth. The hypermodern city airport is a typical research topic in Virilio's political economy of speed. Here, the terrestrial city is described by him as a mere concentration of 'passengers in transit'. The airport is characterized as signifying the archeology of some future society; a society 'concentrated in the vector of transportation'. Henceforth, '[t]he new capital is no longer a spatial capital like New York ... but a city at the intersection of practicabilities of time, in other words of speed' (Virilio and Lotringer, 1997: 67).

It is important to state that Virilio is not arguing that the political economy of wealth has been superseded by the political economy of speed,

rather, he suggests that ‘in addition to the political economy of wealth, there has to be a political economy of speed’:

The physiocrats who provided the basic studies of political economy worked in the tradition of Hume, they were men of perceptions, men of precepts. And when I discuss an economy of speed I’m doing the same sort of work, with the difference that my research examines the comparable power of speed and its influence on morals, on politics, strategies and so on.

My epoch is the epoch of the *Blitzkrieg*! I’m a physiocrat of speed and not of wealth. So I’m working in the context of very old traditions and absolutely open situations. At present we still don’t really know what a political economy of speed really means. It’s research which still awaits subsequent realization. (Virilio, 1998a: 10–11)

Even so, in *La Dromoscopies ou la lumière de la vitesse* (1978), *Speed & Politics* (1986) and *Popular Defense & Ecological Struggles* (1990), Virilio approaches these and related issues while also developing the breadth of his dromological inquiry to include considerations on pure power – the enforcement of surrender without engagement – and revolutionary resistance, an imaginative case against the militarization of urban space. In later works, as Kellner discusses in his article in this collection, Virilio argues that it is vital to focus on the merciless logic of *Pure War* (Virilio and Lotringer, 1997: 167–85) – the undeclared war of militarized technoscience on the civilian population. The ‘rationale’ of pure war might be encapsulated as the logic of technoscience in the era of ‘cyber-’, or, ‘Info-’ war, an era in which ‘terrorists’ and other (often unspecified) ‘enemies’ are invoked by the state in order to justify increased spending on ‘the third age of military weaponry’. Moreover, as Cubitt suggests in his piece in this collection, for Virilio, the concept of pure war also incorporates the ‘weaponry’ of new information and communications technologies, interactivity and the Internet. Why? Because, ultimately, it is the weapons of the military industrial complex that are responsible for ‘integral accidents’ like the 1987 world stock market crash brought about by the failure of automated programme trading.<sup>5</sup> Thus, for Virilio (Virilio and Lotringer, 1997: 184): ‘[s]cience itself has become pure war, and it no longer needs enemies. It has invented its own goal.’

In texts such as *The Aesthetics of Disappearance* (1991a) and *The Lost Dimension* (1991b), Virilio, now supporting Mandelbrot (1977) and the geometry of fractals, aims to demonstrate that cultural theory must take account of interruptions in the rhythm of human consciousness and ‘morphological irruptions’ in the notion of the physical dimension. Utilizing the concept of ‘picnolepsy’ (frequent interruption) and scientific ideas drawn from Einstein’s relativity theory, he argues that hypermodern vision and the hypermodern city are both the products of military power and time-based cinematic technologies of disappearance. Furthermore, although there are political and cinematic aspects to our visual consciousness of the cityscape, what is indispensable to them is their ability to designate the

technological disappearance of the grand aesthetic and spatial narratives and the advent of micro-narratives. In Virilio's terms, Mandelbrot's geometry of fractals reveals the appearance of the cinematic, or 'overexposed' city – as when the morphological irruption 'between space and its form-image and between time and its technical de-realization' splinters into a countless number of visual interpretations, 'open conflict with the regime of telecommunication' and 'the crisis of whole dimensions' (1991b: 9–28, 59–68). Significant here is that Virilio's concerns about the aesthetics of disappearance and the crisis of the physical dimension are not exercised by the textual construction of totalizing or developmental intellectual 'explanations' and 'systems', but with the strategic positioning of productive interruptions, suggestions, jumps and the creative dynamics of what he, following Churchill, calls the 'tendency', or the 'change of level' (1989: 80; Virilio and Lotringer, 1997: 44). As McQuire and Crogan argue in their individual contributions to this collection, the rule in Virilio's fully fledged dromocratic society is the disappearance of aesthetics and whole dimensions into a militarized and cinematographic field of retinal persistence, interruption and 'technological space-time'. In other words, the screen becomes the new 'city square' and 'the crossroads of all mass media', the 'phantom landscape' of all those driven blind by the speed of light (Virilio, 1991b: 25–7).

Virilio's chief ambition, therefore, is to raise the critical question of perpetually increasing speed, or dromology. For him, the relentless logic of speed plays a crucial part in the militarization of urban space, the organization of territory and the transformation of social, political and cultural life. Dromology is an essential component of urban space, the politics of transportation and information transmission, and the aesthetics of technologically generated perception. Pursuing the accelerating and organizational logic of the political economy of speed and drawing on the ancient military texts of Sun Tzu, the artistic work of Marinetti, and the scientific writings of Mandelbrot and Einstein, Virilio accordingly rejects the notion that the political economy of wealth is the sole driving force of cultural and social life. Instead, it is the tyranny of eternally intensifying acceleration that makes history progress 'at the speed of its weapons systems' (Virilio, 1986: 68).

### **From Modernism to Hypermodernism and Beyond**

Virilio's exegesis of speed in terms of military space, the organization of territory, dromology and the aesthetics of disappearance is an important contribution to the fields of critical cultural and social theory because it diverges from the increasingly sterile current debate over the differentiation of modernism and postmodernism. It is, for instance, quite wrong of critical cultural and social theorists such as Harvey (1989: 351), Waite (1996: 116), Gibbins and Reimer (1999: 143) and various others like the positivist physicists Sokal and Bricmont (1998: 159–66) to characterize Virilio's cultural theory as either postmodern or poststructuralist cultural theory. In

fact, such characterizations are so far wide of the mark it is difficult to know where to begin. I will explain.

First, although the concept of postmodernism, like Virilio himself, originally came to prominence in architectural criticism in the 1950s and 1960s, Virilio's cultural theory is neither an overt reaction against the International Style nor a reaction against the concept and culture of modernism in general. The concept of postmodernism, Virilio proposes in the hypermodern interview, has been a catastrophe in architecture and has nothing to do with his phenomenological critique of speed. In reality, like Deleuze's, Virilio's cultural theory draws extensively on the modernist tradition in the arts and sciences.<sup>6</sup> In it, Virilio constantly references modernist writers such as Kafka and Aldous Huxley, and modernist artists like Marinetti and Duchamp. His most consistent philosophical reference points are Husserl and Merleau-Ponty, phenomenologists and modernists. Furthermore, Virilio's later writings regularly cite Einstein's works on relativity theory and quantum mechanics. Here, then, are clear instances of Virilio's broad commitment to the philosophy of scientific modernism established in the early part of the 20th century.

Second, as Virilio points out in the hypermodern interview, he sees no connection between his cultural theory and that of deconstructionists like Derrida. Additionally, there are only a small number of associated links between Virilio's work and poststructuralism. For instance, Virilio has never shown any interest in de Saussure's structural linguistics, preferring instead to remain to this day within the orbit of phenomenology and existentialism. As an anti-Marxist (and anti-Sartrean), committed anarchist and cultural theorist who has 'absolutely no confidence in psychoanalysis', he has little in common with many of the pioneers of structuralism such as the semiologist Barthes, the Marxist philosopher Althusser, the psychoanalyst Lacan and the anthropologist Lévi-Strauss (Virilio and Lotringer, 1997: 39). As a number of contributors to this collection suggest, Virilio's theoretical connections with Foucault's (1977) *Discipline and Punish* and Deleuze and Guattari's (1987) *A Thousand Plateaus* also need to be treated with care. This is because, unlike most postmodern or poststructuralist cultural theorists, Virilio is a *humanist* and a practising Christian. He is, as he insists unequivocally in the hypermodern interview, completely opposed to the viewpoint of anti-humanism and to the philosophy of Foucault's and Deleuze's messiah, Nietzsche. Interestingly, Guattari always denied that he was a Nietzschean, not that anyone seems to have taken any notice (e.g. 1996: 23). There are, as a result, only indeterminate and convergent relationships between Virilio's cultural theory and Foucault and Deleuze's poststructuralist cultural theories. This is also something that Virilio has pointed out on a number of occasions (e.g. Virilio and Lotringer, 1997: 44–5). For Virilio, the crucial pointers on all his work on dromology and related topics have been the Second World War, military strategy and spatial planning.

Third, in contrast to many postmodern cultural theorists, Virilio does



not provide a blanket condemnation of modernity. Rather, as he argues in the hypermodern interview, he views his cultural theory as a 'critical analysis of modernity, but through a perception of technology which is largely... catastrophic, not catastrophist'. Arguing that 'we are not out of modernity yet, by far', it is, then, 'the drama of total war' that lies at the core of Virilio's cultural theory. Choosing to concentrate his thought on the fluctuating rhythms and varying speeds of modernity, Virilio's texts thus concern themselves with its key characteristics such as science, rationality, surveillance, urbanism, democracy and, above all, alienation. In addition, and despite his reputation as a technological Cassandra, Virilio often insists that his conception of modernity, as distinct from the philosophers of postmodernism, is essentially optimistic. As he recently suggested to Zurbrugg:

Many people only seem to notice the pessimistic side of my writing. They don't realize that it's the global dimensions of the twentieth century that interest me – both the absolute speed and power of the twentieth century's telecommunications, nuclear energy and so on, and at the same time the absolute catastrophe of this same energy! We're living with both of these things! (Virilio, 1998a: 2)

Furthermore, Virilio is not wholly antipathetic to reason as such, even if he is critical of some aspects of the 'Enlightenment project'. But, like Deleuze, he certainly is inimical to Hegelian and Marxist theories of knowledge and ideology, including, on occasion, those proposed by 'messianic' Marxists and critical theorists like Benjamin (see e.g. Virilio, 1991b: 72). To some extent, therefore, as Kellner proposes in this collection, Virilio can be considered as a kind of 'left Heideggerian'. In brief, Virilio's critical relationship to modernity is far more complex and removed from the caricatured description of it given by many modern and postmodern cultural theorists.<sup>7</sup>

Fourth, as Virilio argues in the hypermodern interview and elsewhere, his writings have very little to do with those of the advocates of postmodernism like Lyotard (1984) and, arguably, Baudrillard (1983, 1994). Unlike Lyotard's work, for example, Virilio's work remains true to the principle of hope with regard to making sense of history. Actually, one could make a good case for suggesting that nearly the entirety of Virilio's cultural theory is a sustained attempt to make sense of his own history and, through it, ours too. Still less does Virilio accept the demise of *all* the 'metanarratives', insisting in the hypermodern interview, for instance, 'that the narrative of justice is beyond deconstruction'. Likewise, Virilio's general hostility to Marxism, semiotics and Nietzschean 'nihilism' largely explains his antagonism toward Baudrillard's concept of simulation. Again, unlike many postmodern cultural theorists, Virilio does not share Baudrillard's admiration for McLuhan's (1994) 'drooling' (Virilio, 1995: 10) over new media technologies. Similarly, Virilio's writings are less concerned with Baudrillard's

'hyperreality' and 'irony' and more concerned with social reality, the celebration of ordinary people and the poor in particular.<sup>8</sup>

For these reasons, it is very difficult to characterize Virilio's cultural theory as either postmodern or poststructuralist cultural theory. It is also why – in my view – it is preferable to interpret it as the work of a cultural theorist whose thinking addresses what might be termed the question of hypermodernism, or, perhaps alternatively, 'the cultural logic of late militarism'. Consequently, in Virilio's hypermodern world, it is time 'to face the facts: today, speed is war, the last war' (1986: 139).

### **From the War Machine to the Flesh Machine**

Since the publication of *War and Cinema: The Logistics of Perception* (1989) and *L'Horizon négatif* (1985) in France in the mid-1980s, Virilio has periodically applied the concept of 'substitution' when touching on the different classes of reality that have unravelled since the origin of time. It must be said that this concept bears a remarkable likeness to Baudrillard's (1983, 1994) concepts of 'simulation' and 'simulacra'. For all that, in *War and Cinema* in particular, Virilio does not so much explain his idea of substitution as introduce and demonstrate its growing cultural significance. Writing on the cinema in the 1930s, for example, he notes that 'it was already clear that film was superimposing itself as a geostrategy which for a century or more had inexorably been leading to the direct substitution, and thus sooner or later the disintegration, of things and places' (1989: 47). Virilio's primary concern, however, is with the link between cinematic and geostrategic substitution, the disintegration of things and places, and what he calls the logistics of perception. The logistics of perception is perhaps less complicated than one might imagine and simply denotes the supplying of cinematic images and information on film to the front-line. The idea of the logistics of perception arises because, in the context of hypermodern wars like the Persian Gulf War of 1991 or NATO's war in 1999 against Milosovic's Serbia, not only do settled topographical features disappear in the midst of battle but so too does the architecture of war. For the military high command entombs itself in subterranean bunkers with the chief aim of evading what one of Coppola's helicopters in the film *Apocalypse Now* announced as 'Death from Above'.<sup>9</sup> Consequently, and in a similar manner to Baudrillard's (1983: 2–3) conceptualization of simulation, hyperreality, and the 'precession of simulacra', Virilio (1989: 66) conceptualizes a logistics of perception where 'the world disappears in war, and war as a phenomenon disappears from the eyes of the world'.

Thus, at the forefront of Virilio's interests in texts such as *L'Écran du désert: chroniques de guerre* (1991c) is the relationship between war, substitution, human and synthetic perception. Such interests are fuelled by the fact that, for Virilio, military perception in warfare is comparable to civilian perception and, specifically, to the art of film-making; in brief, both groups are increasingly concerned with directing images. According to Virilio, therefore, the notion of substitution eventually results in a 'war of images', a

sort of 'video game', cyber-, or, more commonly, Infowar. Yet Virilio's war of images is not a traditional war, where the images produced are images of actual battles. Instead, for him, the disparity between the images of battles and the actual battles is currently being 'derealized'. As Virilio puts it: 'People used to die for a coat of arms, an image on a pennant or flag; now they [die] to improve the sharpness of a film. War has finally become the third dimension of cinema' (1989: 85). Of course, like Baudrillard's (1995) infamous claim that the Gulf War did not take place, Virilio's assertion that war and cinema are virtually indistinguishable is open to dispute. Conrad, for example, reviewing *War and Cinema*, claimed that 'Virilio is himself the victim of the 'interpretation mania' which he maniacally discovers in the impediments of war' (1989: 939). Virilio, though, remains unimpressed by such criticisms. One reason for this is that his stance on the appearance of Infowar is also consistent with his view that the only way to match cultural and social developments in the war machine is to adopt a radical and critical theoretical position with regard to the various parallels that exist between war, military weaponry, eyesight, photography and cinema. In 'A Travelling Shot Over Eighty Years', the final chapter of *War and Cinema*, Virilio vividly describes such parallels as the 'conjunction between the power of the modern war machine, the aeroplane, and the new technical performance of the observation machine' (1989: 71, original emphases). Virilio's work on the relentless automation of the war machine and related cinematic topics published in the late 1980s, together with his deepening preoccupation with remote-controlled technologies, accordingly betokens his vehement critiques of *The Vision Machine* (1994b) and *Polar Inertia* (1999a) that were to appear over the next few years.<sup>10</sup>

In Virilio's hypermodern epoch, then, when people 'no longer believe their eyes, when their *faith in perception* became slave to the faith in the technical *sightline*', contemporary cultural and social substitution has reduced the 'visual field' to the 'line of a sighting device' (1994b: 13, original emphases). Seen from this perspective, *The Vision Machine* (1994b) is a survey of what I call pure perception. For, although substitution has been revealing different categories of cultural and social reality over the entirety of human history, in the contemporary era, ominous technological substitutions and potentialities such as Virtual Reality, the Internet and cyberspace have been developed by the military industrial complex. In Virilio's terms, and returning to earlier themes, 'the main aim' of pure perception is 'to register the *waning of reality*'. Indeed, for him, 'an aesthetic of disappearance' has 'arisen from the unprecedented limits imposed on subjective vision by the instrumental splitting of modes of perception and representation' (1994b: 49, original emphases). Hence, as in the case of NATO's Cruise missiles 'disappearing' over the horizon and filming their own and civilian destruction in the cities of the Balkans, Virilio conceives of vision machines as the accelerated products of '*sightless vision*'; a vision that 'is itself merely the reproduction of an intense blindness that will become the latest and last form of industrialization: *the industrialization of the*

*non-gaze*' (1994b: 73, original emphases). Even so, the far-reaching cultural and social relationships between vision, remote-controlled technologies, pure perception, post-industrial production and human stasis are illustrated in their most complex form by Virilio in *Polar Inertia* (1999a).

In this text, Virilio considers various kinds of pure perception, speed and inertia. For instance, in his contribution to this collection, 'Indirect Light', Virilio examines the difference between the new synthetic video screens adopted by the Paris Metro system and traditional or 'real' perceptual objects such as mirrors, from a theoretical standpoint that broadly conforms to what Foucault (1977) labelled 'surveillance societies' and Deleuze (1995) later called 'control societies'. In contrast, in 'The Last Vehicle', Virilio notes the discrepancy between technologically generated inertia and biologically induced human movement in the context of a discussion about the introduction of 'wave machines' in Japanese swimming pools. 'Kinematic Optics' relates the effacement of a variety of 'local times' around the world and their gradual replacement by a single 'global time', while 'Environmental Control' contemplates the disparity between 'classical optical communication' and 'electro-optical commutation'. In the era of substitution and pure perception, though, Virilio argues that it is not the creation of relative speeds, acceleration and deceleration that becomes important but the creation of 'Polar Inertia'.

Polar inertia? Here, Virilio proposes that in the early modern era of mobility, in his terms the era of emancipation, inertia did not exist. The concept of polar inertia thus excludes what would have been alternate aspects of the speed equation – simple acceleration or deceleration – in the industrial age. But, today, as Virilio suggests in the hypermodern interview, in the post-industrial age of the absolute speed of light, 'it is no longer necessary' for anyone to 'make any journey' since 'one has already arrived'. As he tells Lotringer in *Pure War*:

We're heading towards a situation in which every city will be in the same place – in time. There will be a kind of coexistence, and probably not a very peaceful one, between these cities which have kept their distance in space, but which will be telescoped in time. When we can go to the antipodes in a second or a minute, what will remain of the city? What will remain of us? The difference of sedentariness in geographical space will continue but real life will be led in a polar inertia. (Virilio and Lotringer, 1997: 64)

In such circumstances, then, the geographical difference between 'here' and 'there' is obliterated by the speed of light. Additionally, in its terminal mode, as exemplified by reclusive billionaires such as the late Howard Hughes, polar inertia becomes a kind of Foucauldian incarceration. Holed up in a single room in the Desert Inn hotel in Las Vegas for 15 years, endlessly watching Sturges' *Ice Station Zebra*, Hughes, Virilio's 'technological monk', was not only polar inertia incarnate but, more importantly, the first inhabitant of an increasingly 'mass situation', the quest for the progress

of speed without the knowledge of the engine's exterminating character' (Virilio and Lotringer, 1997: 77, original emphasis). So, at the broadest level, Virilio's writings on vision machines and polar inertia seek to show that artistic practices and physical geographical spaces no longer have significant human content. As a result, it is not too surprising to find that, in the contemporary era and in works such as *The Art of the Motor* (1995), Virilio has turned his attention to the transplant revolution, technoscience, cybernetic performance art, endo-colonization and technological fundamentalism.

On the eve of the 21st century, therefore, Virilio's cultural theory is predominantly concerned with how various forms of technological substitution have begun to permeate the totality of dromocratic society. For him, one of the most important cultural developments in this field is what he calls the transplant revolution – the almost total collapse of the distinction between technology and the human body. Intimately linked to the technological enhancement and substitution of body-parts through the miniaturization of technological objects, dynamic inserts and cardiac simulators, the third revolution is a revolution conducted by technoscience against the human body through the promotion of what the Critical Art Ensemble (CAE) (1998: 118–37) calls 'second wave eugenics' to the wealthy. As Zurbrugg reveals in his contribution to this collection, such disturbing developments are also the foundations of Virilio's (1995: 109–12, 1998a: 3) scathing criticisms of the 'psycho' and cybernetic, or 'terminal' convictions of Stelarc, the 'Antonin Artaud of technology' and Australian performance artist (see e.g. Stelarc, 1997). However, it should be stressed that Virilio's criticisms of the transplant, or 'third revolution', in concert with his critique of artists such as Stelarc, are also closely linked to the development of his notion of endo-colonization – what takes place when a political power like the state turns against its own people or, as in the case of technoscience, the human body. As Virilio argues in the hypermodern interview, 'there is no colonization' of territory 'without control of the body. One has, for example, 'only to watch those nerdy "internaut" types to see to what extent their behaviour is already being shaped by technology'.

Virilio's criticisms of the transplant revolution, in conjunction with those of 'neo-eugenics', Stelarc and the technocultural endo-colonization of the human body thus demonstrate how, in the contemporary era, the dromocratic regime is conceivably a 'pancapitalist' system that involves 'the coming of age of the flesh machine', the development of 'cyborgs', 'designer babies' and a 'new eugenic consciousness' (CAE, 1998). For these reasons, in *Open Sky* (1997a: 116–17) and other recent works such as *La Bombe informatique* (1998b) and *Politics of the Very Worst* (Virilio and Petit, 1999), Virilio has elaborated a critique of cyberfeminism that Plant (1997), following Haraway's (1985) 'manifesto for cyborgs' and the declarations of Australian artists such as VNS Matrix, speaks of as a kind of revolution on the part of cybernetic technology and feminists against the rule of patriarchy. Cyberfeminism thus endeavours to delete what might be termed

the *différance* between technology and women, or, as Plant puts it, “‘if machines, even the machines of theory, can arouse themselves, why not women?’” (1997: 59).

Plant’s question relates to issues of technology, cyber cultural theory, cybersexuality and the politics of cyberspace. But, as Conley makes clear in her contribution to this collection, Virilio has little time for notions such as cyberfeminism and ‘cybersex’; notions that in the hypermodern interview he criticizes, likening cybersex, for instance, to the technological replacement of the emotions. For Virilio, it is imperative to reject cybernetic sexuality, refocus theoretical attention on the human subject, and resist the domination of both men and women by technology. He sums up his current political position well in the closing pages of *La Bombe informatique*, announcing, ‘*Homo est clausura mirabilium dei*’ – Man is the end point of the marvels of the universe (1998b: 152, original emphasis). In the world according to Virilio, then, cyberfeminism is merely one more form of ‘technological fundamentalism’ – the religion of all those who believe in the absolute power of technology (Virilio and Kittler, 1999, forthcoming). In brief, in the realm of what he labels ‘*technoculte totalitaire*’, the lure of cyberspace is terminal because, through it, human subjects allow themselves to be dominated by cybernetic and technological objects (1998b: 48). Consequently, cyberfeminists and numerous other groups, lacking any awareness of ‘cyberresistance’, are characterized by Virilio as ‘collaborators’ with the ‘Occupation’ forces of multimedia ‘generals’ such as Microsoft’s CEO, Bill Gates (1999b: 1–3). Having departed from the religious sensibility required in order to understand the ubiquity, instantaneity and immediacy of new information and communications technologies, cyberfeminists, like the Heaven’s Gate sect that performed mass self-destruction recently in the USA in order to migrate to the stars, have now capitulated to the raptures of cyberspace (Virilio, 1998b: 51). In Virilio’s terms, cyberfeminists are moving inexorably towards a technologically fundamentalist political position with regard to new information and communications technologies such as the Internet; a position he recently denounced in the following apocalyptic style:

No longer the monotheism of the Written Word, of the Koran, of the Bible, of the New Testament, but a monotheism of information in the widest sense of the term. And this information monotheism has come into being not simply in a totally independent manner but also free from controversy. It is the outcome of an intelligence without reflection or past. And with information monotheism comes what I think of as the greatest danger of all, the slide into a future without humanity. (Virilio and Kittler, 1999, forthcoming)

### **A Brief Sortie into the War Zone**

As the previous sections, and the final article in this collection by Der Derian, clearly suggest, Virilio’s numerous activities and ‘conceptual cosmology’ have courted controversy since the 1960s. For example, when

Virilio and Parent wrote their articles in the *Architecture Principe* review, they claimed that the world should abandon horizontal planes and organize itself on inclined planes instead. Nonetheless, as Parent recalls: 'We might have been forgiven if we had just called the things "slopes". As it was we encountered absolute opposition. The magazine was our counter-attack' (Johnson, 1996: 54). Similarly, Virilio's later conceptions of the 'suicidal state' (1998c: 29–45), the 'state of emergency' (1986: 133–51), technology and speed have also been subject to considerable critique. In the 1980s, for instance, Deleuze and Guattari (1987: 351–423, 559) attempted what Crogan (1999, forthcoming) calls a problematic effort to 'subsume' Virilio's investigations into their own poststructuralist approach to the state, technology and speed. Even so, as Crogan argues in his article, Deleuze and Guattari's 'static, ahistorical model' of the state and technology cannot easily be combined with Virilio's ideas without undoing 'its own coherency in the process'. In turn, Virilio's *The Aesthetics of Disappearance* (1991a) has outraged the neo-Marxian geographer Harvey (1989: 293, 299 and 351). For Harvey, Virilio's 'response' to what the former calls 'time-space compression' 'has been to try and ride the tiger of time-space compression through construction of a language and an imagery that can mirror and hopefully command it'. Harvey places the 'frenetic writings' of Virilio (and Baudrillard) in this category because 'they seem hell-bent on fusing with time-space compression and replicating it in their own flamboyant rhetoric'. Harvey, of course, has 'seen this response before, most specifically in Nietzsche's extraordinary evocations in *The Will To Power*'. Yet, in *The Aesthetics of Disappearance* (1991a), Virilio's unfolding and wholly intentional reactions to the emergence of the dromocratic condition are actually concerned with 'the importance of interruption, of accident, of things that are stopped as *productive*' (Virilio and Lotringer, 1997: 44, original emphasis). As he told Lotringer: 'It's entirely different from what Gilles Deleuze does in *Mille Plateaux*. He progresses by snatches, whereas I handle breaks and absences. The fact of stopping and saying "let's go somewhere else" is very important for me' (Virilio and Lotringer, 1997: 45). What Virilio's 'frenetic writings' actually substantiate throughout the 1980s are the material and, crucially, the *immaterial* consequences of dromological changes in aesthetics, military power, space, cinema, politics and technology. In an era increasingly eclipsed by the technologically produced disappearance of socio-cultural life, war, matter and human perception, this is a very significant achievement. In the 1990s, though, the limitations of Virilio's cultural theory are likely to rest not – as Harvey suggests – with his similarities but with his *differences* from Nietzsche. As Waite, quoting the American performance artist Laurie Anderson, and others have argued:

Virilio still desperately holds on to a modicum of modernist *critique* of postmodern military tactics, strategies, and technologies, whereas Nietzsche basically would have been impatient with mere critique, moving quickly to *appropriate* them for his own use, at least conceptually and rhetorically, as

metaphors and techniques of persuasion to preserve power for elites over corpses – ‘now that the living outnumber the dead’. (Waite, 1996: 381–2, original emphases)<sup>11</sup>

### Conclusion

Although there are many controversial features and vexing questions connected to Virilio’s cultural theory, there is also little doubt that his hypermodern critique of military tactics, strategies and technologies is presently colliding with the work of a rising number of other cultural theorists like the Krovers. Naturally, the main reason why such collisions are taking place is that Virilio’s latest texts, such as *Politics of the Very Worst* (Virilio and Petit, 1999), address head on some of the most alarming and significant contemporary cultural and social developments of our time; developments often designed to preserve the power of the increasingly virtual global elites over the creation of actual local corpses. As I write this conclusion in June 1999, for example, the living are rapidly increasing the numbers of the dead in Kosovo, Angola, southern Mexico, East Timor and almost anywhere else on the planet one cares to look. As Burroughs maintained, this is a war universe. War all the time. A child of Hitler’s *Blitzkrieg*, Virilio has theorized the cultural logic of late militarism and the organization of territory, the central theme and the most important aspect of his work. Revealing the probable dromological and political conditions of the 21st century, Virilio interprets modernity in terms of a military conception of history and the endo-colonization of the human body by technoscience. As the title of this collection indicates, the concept of hypermodernism needs to be uppermost in any understanding of Virilio’s particular contribution to cultural theory.

Virilio is, therefore, one of the most important and thought-provoking cultural theorists on the contemporary intellectual battlefield. He is, as Brugger argues, an ‘archeologist’ who ‘examines the technological inventions of our time in order to find the *signs* that indicate where the acceleration of speed will be seen in the future’ and, in addition, ‘tries to point out the possible *negative effects*’ of the dialectic of speed and disappearance (1997: 17, original emphasis). However, unlike Lyotard’s or Baudrillard’s postmodernism, Virilio’s hypermodernism does not articulate itself as a divergence from modernism and modernity but as a critical analysis of modernism and modernity through a catastrophic perception of technology. Indeed, Virilio put his general position forward recently and succinctly in the context of a discussion about technology:

When someone says to me I don’t understand your position, my response is, I’ll explain it to you: I am a critic of the art of technology. Fair enough? That’s all. If they still don’t understand, then I say: just look at what an art critic is to traditional art, and then substitute technology for traditional art, and you have my position. It’s that simple. (Virilio and Lotringer, 1997: 172)



Virilio's theoretical position, current trajectory and cultural sensibilities concerning technology thus remain almost *beyond* the realm of even the critical social sciences. He simply does not depend on intellectual 'explanations', 'constructing clear systems', or writing 'machines that work well' (Virilio and Lotringer, 1997: 44). Rather, he relies on 'suggestion' and 'the obvious quality of the implicit'. On the one hand, then, it is possible to describe a critic of the art of technology like Virilio as a cultural and a political theorist who movingly considers the tendencies of the present period. On the other, it makes little sense to describe someone who utterly rejects the many 'masks' that sociology wears 'in order to forget politics' as a typical social theorist.

As a result, and as several contributions to this collection suggest, it is still open to debate as to how much there is to be gained from the growing army of social theorists currently attempting to establish the 'truth' or otherwise of Virilio's cultural and political theory. Such projects might be questioned from the outset because, to a considerable extent, Virilio's critical responses to the military, speed politics, cinema, art and technology are, basically, ethical, artistic and emotional responses to the arrival of technological culture. In his words:

I'm so involved in the world of painting and the world of art that I don't speak about it much in my books because I live it! I'm a painter who writes, you know! Surely you feel that my books are very visual – they're very, very, visual books! They're not words, they're visions! (1998a: 9)

Moreover, Virilio is well aware that his work is 'often dismissed in terms of scandalous charges!' As he recently pointed out, in France '(t)here's no tolerance' for 'irony, for wordplay, for argument that takes things to the limit and to excess' (1998a: 12). Consequently, to raise the question of the advantages and disadvantages of Virilio's cultural theory is also to raise the critical question of whether, outside France, his work should be dismissed in terms of scandalous charges, received in terms suffused with praise, or a mixture of both? In other words, it is to raise the question of how much tolerance there is in the English-speaking world for irony, for wordplay, for argument that takes things to the limit and to excess? For these and other reasons, Virilio's hypermodern cultural theory looks set to continue eliciting theoretical argument, cultural and social debate well into the next millennium.

### **The Contents**

To my knowledge, Wark's 'On Technological Time' was the first critical evaluation of Virilio's work in English. Investigating 'Virilio's Overexposed City', Wark advocated reading Virilio 'as something of an *accidental* mouthpiece for certain observations' (1988: 87, original emphasis). Today, in view of the expanding influence of Virilio's writings on a growing number of other cultural theorists in the English-speaking world, the time has surely come

for a *re*-evaluation of many of his ideas. For one thing, as I have tried to show in the previous sections, the developing critical literature on Virilio presently encompasses much more than his critical reflections on the over-exposed city. For another, many readings of Virilio's work are intentional and unintentional agents for a variety of inaccurate, hostile and often superficial pronouncements. In contrast, the contributions to this collection engage in an assortment of fact-finding, broadly sympathetic and detailed explorations of Virilio's cultural theory from the perspectives of the critical social sciences and the humanities.

As a consequence, while some contributors scrutinize Virilio's biographical and intellectual development, others present supportive assessments of the central themes and conceptual significance of his work. In his hypermodern interview with Armitage, Virilio discusses aspects of his life and explains the main impetus behind his theoretical efforts to strengthen our comprehension of modern and hypermodern culture. Virilio's 'Indirect Light', meanwhile, criticizes contemporary developments in video surveillance and miniaturization. Challenging the relentless illumination of the urban environment, Virilio outlines the likely consequences of cultural life lived under conditions of real time.

Virilio's own particular offering, though, sits alongside studies that present somewhat critical readings of his theoretical claims regarding architecture, war and other issues of current concern such as technology and new media. Leach demonstrates how Virilio and Parent's theory of the oblique can elucidate the spaces of architecture and typology. Examining the contributions of Virilio's writings on dromology, 'post-architecture', cultural space and the body, Leach points to various questions surrounding Virilio's 'aestheticization' of the political. In turn, Gane analyses Virilio's work on bunker archeology and compares his visions of the desert and ecological struggle with those of Baudrillard. Kellner reflects on Virilio's 'flawed' contribution to a militarized and politicized cultural theory of war and technology, an undertaking developed through Virilio's later writings on pure perception and disappearance. Similarly, Cubitt provides a critical overview of Virilio's 'liberal individualism' in the context of a discussion about his understanding of picnolepsia, 'big optics', war, politics, art and technology.

Further contributors, however, provide a more sympathetic response to Virilio's cultural theory in terms of speed, the tendency, and the integral accident. McQuire examines Virilio's analyses of mechanical and media 'vehicles', specifically with reference to their capability to change space and time within the frame of human interaction. Supporting Virilio's theory of speed, Crogan incorporates the writings of Hottois and Derrida, suggesting that Virilio's concept of dromology is useful in explaining the accident, the tendency and the 'untimely'.

In his piece, Zurbrugg appraises Virilio's writings and judgments on the Australian performance artist, Stelarc, arguing that Virilio's artistic concerns are, to some degree, resolved in the technocultural practices of

artists and composers such as Viola and Holtzmann. Showing how Virilio's and Stelarc's work fuses at a number of places, Zurbrugg suggests that both Virilio and Stelarc are best understood as artists in the manner of Duchamp. Although Virilio's writings have had an impact on a number of female artists such as Louise K. Wilson (Virilio, 1997b: 41–8) and, arguably, the prevalent elaboration of technocultural practices, his work has not so far seriously affected the development of feminist or cyberfeminist theory. In her contribution, Conley considers whether it might be conceivable to clear a space for feminism in Virilio's oeuvre or, more precisely, whether it may be possible to accompany Virilio into the time and space of cyberfeminism.

In a lively article discussing Virilio's conceptual cosmology, Der Derian highlights the importance of Virilio's prolific conceptual production in a post-Einsteinian world of instant information, chronopolitics and virtual disappearance. Finally, the collection is drawn to a close by Armitage's select bibliography of Virilio's main published works, articles, interviews and studies of Virilio in French and English.<sup>12</sup>

Thus, the 12 contributions to this collection denote the significant areas in which Virilio's cultural theory and important concepts have drawn on the work of others, while also demonstrating how his concepts can be applied in the present period by theorists in the cultural and social fields. Virilio is a decidedly contentious cultural theorist whose 'calculation', as Baudrillard puts it, 'is to push the military to a kind of extreme absolute of power, which can only ultimately cause its own downfall, place it before the judgment of God and absorb it into the society it destroys' (1987: 109). Such extreme calculations about the role of the military in the realm of chronopolitics, not to mention the apocalyptic and religious tones in which Virilio delivers such forecasts, arouse immoderate and censorious reactions from critical and positivist theorists alike. As noted, Virilio is well aware that, in France and elsewhere, his work is often dismissed as excessive. Hence, it is crucial to emphasise that *Paul Virilio: From Modernism to Hypermodernism and Beyond*, like the broader project of *Theory, Culture & Society*, attempts to provide a genuinely *critical* exploration of Virilio's cultural theory within the framework of the social sciences and the humanities.

#### Notes

1. Gestalt psychology originated in Germany in the early part of this century. Its founders were Wertheimer, Köhler and Koffka. For gestalt psychologists, mental phenomena are extended 'events', or *gestalts*. According to Gestalt theory, cognitive processes cannot be understood in terms of their individual components. Rather, when some new piece of information is acquired, an individual's entire perceptual field has been altered. However, as Virilio makes clear in the interview in this collection, his own particular influence is Guillaume (1937).

2. First, although Virilio does not use the concept of hypermodernism to describe his work, as he clearly indicates in the interview in this collection, he certainly agrees with this interpretation of it. Broadly, and following the pioneering work of Arthur and Marilouise Kroker (see e.g. Kroker, 1992; Kroker and Kroker, 1997), I

will define hypermodernism as a tentative term and embryonic tendency in the contemporary critical social sciences and the humanities that seeks to move away from the polarized assumptions of modernism and postmodernism and toward a deeper theoretical understanding of the 'excessive' intensities and displacements inherent within cultural and social thought about the modern world and how it is represented. In the critical social sciences and the humanities the term might be put to use in the near future to describe the amalgam of styles employed by architects such as Virilio, Nouvel (1996), political theorists like the Krovers, 'sociologists' such as Bataille (Botting and Wilson, 1997), 'amodern' philosophers and political activists like Deleuze and Guattari (1987), and artists and cultural theorists such as Stelarc (1997), Critical Art Ensemble (1998) and Golding (1997). It is perhaps worth stressing that, as editor, I have not sought to establish any consensus on the concept of hypermodernism among the collection's contributors.

Second, since I have already compiled and contributed a detailed biography of Virilio's main works to this collection, in this Introduction I shall only refer to Virilio's most important texts and make use of the English translations of such works. For more detailed references, the reader is referred to 'Paul Virilio: A Select Bibliography' in this volume.

3. In this Introduction my aim is merely to introduce Virilio's cultural theory to those unfamiliar with it. The limitations of Virilio's work are only briefly considered. This is owing to the fact that the 12 other pieces in this collection provide a wealth of detail and a whole variety of critical evaluations and assessments of the impact of Virilio's cultural theory. Additionally, I have borrowed the concept of the 'flesh machine' from the innovative work of the Critical Art Ensemble (1998).

4. Abbé Pierre began campaigning on behalf of the French homeless in the winter of 1954 and quickly became an icon. So much so that one of the numerous 'mythologies' contained in Barthes' (1993: 47–9) famous work of the same name is entitled 'The Iconography of the Abbé Pierre'. However, in May 1996, Abbé Pierre fell rapidly from his esteemed position after supporting the former communist philosopher Roger Garaudy's self-published and 'revisionist' explanation of the Holocaust, *The Founding Myths of Israeli Politics*. Abbé Pierre has since retired to an Italian monastery.

5. For an excellent, detailed, and considered 'Virilian' assessment of the world stock market crash of 1987, see Wark's 'Site # 4, Wall Street. New York City, Planet of Noise', in his *Virtual Geography* (1994: 165–228).

6. A broad allegiance to the concept and culture of modernism is a crucial but so far little remarked upon link between Deleuze's work and that of Virilio. As Marks observes of Deleuze's aesthetics: 'It is striking that the objects of Deleuze's interest are frequently taken from the canon of high modernism. He favours writers such as Kafka, film-makers such as Godard and Antonioni, and painters such as Francis Bacon' (1998: 27). Much the same could be said of Virilio.

7. Virilio is, of course, not the only apocalyptic or catastrophe theorist and adherent of modernity to emerge from post-war French continental philosophy. Deleuze, for example, has also written on the apocalypse in relation to the writings of D.H. Lawrence. Moreover, in the article cited, he also references Virilio's work (Deleuze, 1998: 36–52). Williams has written on the theme of 'catastrophism' in Deleuze's writings (1997: 233–46). Meanwhile, and in the same volume, Ansell Pearson argues – correctly in my view – that Deleuze's philosophy 'needs to be situated

within the general problematic of modernity' (1997: 180–1). For a review of the latter volume, see McLure (1998).

8. However, it is worth pointing out that although Virilio frequently criticizes Baudrillard's work quite sharply in interviews, such criticisms are rarely returned by Baudrillard, who is more often than not complimentary about Virilio's cultural theory (see e.g. Baudrillard, 1987: 109).

9. Apart from the obvious contemporary relevance of the conflict in former Yugoslavia, I mention it in this context because Virilio is currently in the process of writing a book on what he recently called the 'final conflict of the twentieth century'. The book will be published in France towards the end of 1999 (personal communication, 30 May 1999).

10. Many of Virilio's most important texts from the 1980s can be found in his *Un paysage d'événements* (1996).

11. Even though I disagree with Waite's description of Virilio as a Nietzschean thinker, I certainly do agree with his critique of Virilio in this instance. In fact, I have made a very similar criticism in another article (see Armitage, 1997: 206).

12. This collection emerged from a chance meeting between Mike Featherstone and myself at the 'Time and Value' conference, held at the University of Lancaster in the UK in April 1997. I am very much indebted to Mike for his patient support over the past two years. However, the work on this project was made easier than it might have been by financial and administrative research assistance from the Division of Government & Politics at the University of Northumbria at Newcastle, the TCS Centre in Nottingham and Sage Publications. Credit is therefore respectfully due to Ken Harrop, John Fenwick, Neal Curtis, Chris Rojek, and Robert Rojek. I would also like to thank all the contributors to this collection who not only responded to the challenge of the enterprise so magnificently but furnished me with – by now – hundreds of (mostly!) friendly e-mails, letters, reader's reports and other exchanges. Finally, I am grateful once more to Joanne Roberts who endured far too many lengthy monologues about this venture over countless breakfasts, lunches and dinners. It is enough to say that Joanne can now reluctantly add the life and works of Paul Virilio to her many other specialisms.

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**John Armitage** teaches at the Division of Government & Politics, University of Northumbria, Newcastle upon Tyne, UK. Currently working on *Virilio Live: Selected Interviews*, he recently edited *Machinic Modulations: New Cultural Theory & Technopolitics*, a special issue of *Angelaki*, the journal of the theoretical humanities.



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# From Modernism to Hypermodernism and Beyond

## An Interview with Paul Virilio

*John Armitage*

### **Postmodernism and Hypermodernism**

*JA:* Professor Virilio, I would like to begin by charting your place within the contemporary intellectual landscape.<sup>1</sup> For instance, your work is closely associated with the cultural movement known as postmodernism. Certainly, your most recently translated study *Open Sky* (1997 [1995]) is being received as such in the English-speaking world.<sup>2</sup> However, you have always been sceptical of the idea of postmodernism. Could you explain the basis of your critique of this concept?

*PV:* Postmodernism is a notion that makes sense in architecture, through the work of [Robert] Venturi (Venturi et al., 1977) and so on. Since I am teaching architecture, to me, postmodernism is a 'suitcase' word, a syncretism. In architecture it is a clear-cut phenomenon: styles are mixed up, history is ignored, one goes for a 'melting pot' of approaches. But as far as thought is concerned, thought as developed in the years 1970–80, I simply cannot understand why people are talking about postmodernism. Post-structuralism? Yes, OK. Postmodernism? It doesn't make any sense to me. Hence, I do not feel linked at all with postmodernity. Moreover, as a teacher in a college of architecture, I believe postmodernism was a catastrophe in the history of modern architecture. Therefore there is no linkage between me and postmodernism. I know that many people tend to associate postmodernism with relativism, especially with cognitive relativism. Well, this is a new polemic that is cropping up, especially here in France, and which does not concern, let alone interest me in the slightest measure. Another

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thing is that I am a very marginal thinker, I do not relate to any established school of thought. Of course, I am a phenomenologist. When young, I was a pupil of [Maurice] Merleau-Ponty, I loved [Edmund] Husserl. You could call me a 'Gestaltist', I was enthusiastic about the psychology of form, Paul Guillaume, and the Berlin school: these are my intellectual origins.<sup>3</sup> I have been associated with the end phase of structuralism, with [Michel] Foucault, of course, and [Gilles] Deleuze. But I am essentially a marginal figure. The main influence in my work has been the Second World War, that is, strategy, spatial planning, and this body of thinking about total war of which I was victim in my youth.

JA: It seems to me that your work, which is primarily concerned with technological, urban and socio-cultural change, is the work of someone whose thinking addresses the problem of what might be called 'super' or 'hypermodernism'?<sup>4</sup> I say this because your theoretical interventions appear to be aimed not only at intensifying but also at displacing traditional forms of thought about the modern world and the way it is represented. How do you respond to this interpretation?

PV: I totally agree. As a so-called 'war baby', I have been deeply marked by the accident, the catastrophe, and thus by sudden changes, and upheavals. I am a child of the *Blitzkrieg*, the 'lightning war', I am a child of history's acceleration, as Daniel Halévy put it in 1947.<sup>5</sup> Hence, it is clear that my work is a critical analysis of modernity, but through a perception of technology which is largely, I might say, catastrophic. I say *catastrophic*, not *catastrophist*. This is because I have witnessed the drama of total war myself, I have lived through it, the millions of deaths, the cities razed to the ground, all that. As far as 'hyper' or 'super' modernism is concerned, I think we are not out of modernity yet, by far. I think that modernity will only come to a halt within the ambit of what I call the 'integral accident' (Virilio, 1989b [1986], 1997). I believe that technical modernity, modernity taken as the outcome of technical inventions over the past two centuries, can only be stopped by an integral ecological accident, which, in a certain way, I am forecasting. Each and every invention of a technical object has also been the innovation of a particular accident. From the sum total of the technosciences does arise, and will arise a 'generalized accident' (1997). And this will be modernism's end.

JA: Do you consider yourself a modernist author? Your writing style, for example, seems to many people to replace traditional narrative and structure with the 'stream of consciousness' technique...

PV: Yes, I do. Well, let me put it this way: to be concerned with speed, like I am, means to be involved in music. For 20 years now I have been working on 'dromology', that is, on the importance of speed in history, and thus of acceleration (Virilio, 1986 [1977]). Now, if there is a realm where speed is

really an important element, it is music, rhythm, tempo. And thus my writing is a dynamic, cinematic process. Moreover, and I state this as modestly as possible, it is my belief that philosophy is a mere subdivision of literature. To me, Shakespeare is really a great philosopher, perhaps above Kant and a few others.

### Relativity

JA: *Open Sky* (1997 [1995]) brings to the fore one of the most under-appreciated themes of your writings, namely, your interest in Albert Einstein's theory of relativity. This scientific concept is also occasionally viewed as a facet of modernism. How does the theory of relativity relate to your current projects?

PV: Well, frankly, this is quite simple. There is no way one could study the phenomenon of acceleration in all these domains, whether that is in the realm of transportation, or in the realm of information, that is, in the transfer of information, without stepping full scale into the issue of relativity. It is unavoidable. Ours are cinematic societies. They are not only societies of movement, but of the acceleration of that very movement. And hence, of the shortening of distances in terms of time, but, I would also add, of the relation to reality. It is thus simply impossible to ignore the theory of relativity. We're all going through the gates of relativity. It is well known that the theory of relativity is very poorly popularized, it is not at all well-understood by the general public. One cannot skip the theory of relativity for the mere reason that it is difficult to understand. Why so? Because we live it. We live it through mobile phones, through 'live' programmes on TV, through the telecommunications media, through Virtual Reality (VR), through cyberspace, through video-conferencing, through supersonic air travel and so on. Thus, as we live it, we interpret it, in the musical sense of the word. Like one says, 'to interpret a musical score', we, all of us, interpret the theory of relativity through our own lived lives. We do that through our calendar, through our time planning, our relationships, our involvement in love affairs even. We do that through the telephone, for instance, we do that through education, and through 'tele-learning'. We have become deterritorialized. Our embedding in our native soil, that element of *hic et nunc* (here and now), 'in situ', that embedding belongs, now, in a certain way, to the past. It has been overtaken by the acceleration of history, – by the acceleration of reality itself – by 'real time', and by the 'live', all of which are in a stage beyond the *hic et nunc*, 'in situ' condition. Caught as we are between this territory-based embedding, which is of a geographic, geophysical nature, or even of a geostrategic nature in the case of the military, and total deterritorialization, what remains in order to interpret our world? Nothing but relativity! Not the physicists' relativity, but our relativity, the relativity of our own lived lives, for which we are responsible, and of which we are the victims, at the same time. Relativity is no longer the exclusive domain of

(natural) scientists, it has become the property of all those who live in the modern world.

### **Phenomenology and Marxism**

*JA*: Before we move on to discuss your relationship to deconstruction (Derrida, 1973 [1967], 1976 [1967]) and post-structuralism, I would like to ask one or two questions about your own intellectual formation. For example, one of the leading philosophies in France and elsewhere in the immediate aftermath of the Second World War was structuralism...

*PV*: Yes, indeed, absolutely so. And certainly not existentialism...

*JA*: Even so, your own philosophical background developed through an engagement with Merleau-Ponty's *Phenomenology of Perception* (1962 [1945]). What would you say you learnt most from Merleau-Ponty's work and how has it influenced your own?

*PV*: First of all, I was a pupil of Merleau-Ponty, of Jean Wahl and of Vladimir Jankelevitch, to name three French philosophers who were teaching at the Sorbonne at that time. The one to which I felt most attracted was quite naturally Maurice Merleau-Ponty, and his *Phenomenology of Perception*. Why? Because I am so totally involved with perception myself, through my childhood, through painting. Yes, I painted, I even worked with famous painters such as [Henri] Matisse and [Georges] Braque when I was young. I am a man of perception, a man of the gaze. I am a man of the visual school of thought. Therefore, Merleau-Ponty's *Phenomenology of Perception* appeared to me to form a crossroads with the psychology of form, with Gestalt and the whole Berlin School. And thus it is at this crossroads of the psychology of form, Gestalt theory and the *Phenomenology of Perception* that I position myself. And to that one of course has to add the reading of Einstein, of the big scientific names of the time, [Paul] Dirac, [Werner] Heisenberg and yes, of course, [Henri] Bergson.<sup>6</sup> So you have a crossroads there, and it's where I stand, at the intersection.

*JA*: Merleau-Ponty was, for a large part of his life, associated with the philosophy of humanist Marxism. One thing that has always surprised me about your writings, particularly within the intellectual context of postwar France, is the absence of any reference to Marx. What is your relationship, if any, to Marxism?

*PV*: I am no Marxist, nor have I ever been one. But my father was a communist. We'll come back to that later. You see, my mother was a Breton, and my father Italian. Like every young boy (laughs) I had to choose between my mother and my father. So, although I have a lot of respect for my father, I totally reject his political views. I absolutely cannot be a communist. I might well feel at home as a 'communard', as in the Paris

Commune, or as an anarcho-syndicalist, these would suit me. But Marxism, no! Take it as a reaction against my father.

JA: Are you saying that your reasons for rejecting the Marxism of your intellectual contemporaries like Merleau-Ponty were autobiographical rather than theoretical?

PV: Yes, you're right, my intellectual contemporaries were communist to a man. I was not. But my reasons were theoretical also. This is because, when I was young, I converted to Christianity. I converted when I was 18, as an adult. The war had just ended then, and I had seen terrible things, and that was also one of the reasons for my conversion to Christianity. But then, you must know that I converted in the company of 'worker-priests'. Worker-priests are, in France, those priests who take an industrial job and go to live with the factory workers. They do not display their pastoral cross. I chose to convert with a worker-priest because I wanted something real, not some religious show with a guy in a costume. It is since that time that I have worked with Abbé Pierre.<sup>1</sup>

JA: Would it be correct, then, to suggest that you have no *theoretical* objections against socialism, against the left as a body of thought?

PV: No, of course not, I have nothing against socialism. I belong to the left, that is quite clear...

JA: Nevertheless, in the immediate aftermath of the Second World War, many of your friends were not merely on the left but also committed Marxists...

PV: True...

JA: Can you recall why you felt it necessary to develop your own political perspective at that time?...

PV: I feel that many of my contemporaries have totally blacked out the war from their minds. Many of them never experienced totalitarianism. I lived through that experience. With a communist father, who was Italian to boot, we had to make our escape from totalitarianism, from Nazism and so on. It was no joke to be both communist and Italian during the Second World War (in occupied France). This meant that I never could get involved in something that appeared to me, right from the beginning, to be a totalitarian phenomenon. Yet I have always remained interested in the leftist dimension within Marxism.

**'Anarcho-Christianity'**

JA: You spoke earlier of your conversion to Christianity. What role does it play in your work? Do you see yourself, for example, as part of a French Catholic moral tradition that might include other Christian and existentialist critics of technology like Gabriel Marcel or Jacques Ellul?<sup>8</sup>

PV: Yes, I do see linkages, especially with Jacques Ellul, rather than with Gabriel Marcel, who is from an earlier generation. But I cannot really place myself within what you call a Catholic tradition. The reason is that I have always been utterly unable to write about my faith. I do not have the gift for that. I have always considered that my life as a follower of Christ was something happening through my everyday life, not through my theoretical writings. It is not that I refuse to do it. I would gladly write a book about it, but I simply do not have the gift for it. You see, I do not have much of a theological culture. My conversion was an affair of the heart, a love affair you may say, more than an intellectual one. Speaking of religion, I feel much more at ease with an ordinary, poor person. When I am writing, I am somewhere else.

JA: In the late 1950s and throughout most of the 1960s the philosophy of structuralism began to challenge Christian existentialism, phenomenology and humanist Marxism. Structuralism was, of course, profoundly *anti*-humanist. Could your own theoretical approach be described as anti-humanist?

PV: Oh, not at all. I am an anarcho-Christian. It sounds quite paradoxical, but to me the definition of man is subsumed, and I quote it often, in a saying by someone I have come to like very much, Hildegard of Bingen. St Hildegard wrote, composed music, played harp, and was many other things at once. The saying is: '*Homo Est Clausura Mirabilium Dei*': 'Man is the closing point of the marvels of the universe' (i.e. God). Thus, for me, Man is not the centre of the universe, he is the end of the universe, the end of the world. This has nothing to do with ideas like 'transcendental ego' or 'egocentrism'. For me, there is nothing beyond man. Forget about technology, eugenism, robotics, prostheses. Forget also about [Friedrich Nietzsche's] '*Uebermensch*' [Overman]. I do not believe these ideas are at all humanist. I think they're far worse. This is a very important point for me, because I am absolutely against this newfangled form of totalitarianism which I call technoscience and its cult. I see there a yet unheard-of eugenics programme, eugenics written very large, far beyond [Sir Francis] Galton's.<sup>9</sup> The idea behind this new brand of eugenicism being to perfect man, to make a better man. Well, there is no such thing as the possibility of 'improving' man, of tinkering man into something better. No way. Never.

JA: You would say that such a programme would not be a desirable aim?

PV: No indeed, I believe it is not. Yet it is exactly the programme of technoscience. Take, for instance, 'Dolly' [the recently cloned sheep], take neo-eugenicism, clones, take all new technologies. We see now a eugenic desire running amok.

### **From Military Space to Cyberspace**

JA: The initial significance of your theoretical work flows from your architectural and photographic enquiries, documented in *Bunker Archeology* [sic] (1994a [1975]), into the 'Atlantic Wall' – those 1500 German bunkers constructed during the Second World War along the French coastline to prevent an Allied invasion...

PV: There were in fact 15,000 of them, one zero more! And they stretched along the West European coast all the way up to Denmark. But about me: I spent my youth in the town of Nantes. Nantes lies at the mouth of the Loire, just before the Atlantic Ocean. Its true oceanic harbour is St Nazaire, where there was a German submarine base, and in fact an Allied landing took place there at some stage. Thus I spent the war time as a boy, with the sea just one hour away, yet without ever being able to go and see it: the seashore was a forbidden zone. So when liberation finally came, I rushed to the sea, to the beaches, like everybody else did. And there I encountered structures which were littering the beaches: the bunkers of the Atlantic Wall. And thus at the same time as I saw the sea for the first time, I also discovered these mysterious, enigmatic architectural structures. To me, they were like the statues on Easter Island. And so, for ten years, I went on a quest after these structures. I sketched and photographed these bunkers in order to come to grips with the totalitarian dimension of the war. My first snapshots were taken in 1957, the last ones in 1965.

JA: What was the connection between this discovery and your thinking on military space?

PV: First, it was an emotional discovery, which you might compare with Victor Segalen's first encounter with Chinese sculpture. You can also call it an archaeological experience, and a shocking one. Another element, aside from this encounter with military space, and which led me to write *Bunker Archeology*, was that I wanted to get involved in the study of urban phenomena, in the city and its technique. I switched over to urbanism, to architecture and thus to the study of the technique's impact on the space of the city, and the way it alters the urban landscape. And at this point, you of course meet Gestalt theory, the psychology of forms. Military space is an organized form of perception. When I was a conscript – I served in the artillery – I was a gunner. Part of my military service was in Germany, in the French occupation zone. I was stationed in Freiburg, at the HQ of the First French Army. I ended up as a cartographic officer in the staff of Field Marshall Juin. In this function I made a good number of military surveys in



the Black Forest region, to be used in manoeuvres taking place in the occupied zone. So everything is linked up. There is an aesthetic kind of involvement with bunkers, and an urbanistic one in the field of regional planning. Over thousands of kilometres, the coast was organized in such a way as to be controlled by sight. It is that logic that made me understand to what extent the war had been a total one. War had not only conditioned the people through manslaughter, Auschwitz and wholesale executions, it had also reorganized the territory, just like the Great Chinese Wall had done. One could say that military architecture was the first incarnation of Land Art. In fact, minimalist and Land artists like Robert Morris came to me later to reflect on my book, and said they had found it most interesting.<sup>10</sup>

JA: In *The Function of the Oblique* (Johnston, 1996) you, along with the architect Claude Parent, outline your efforts in the 'Architecture Principe' group of the early 1960s to initiate an urban regime based on the theory of the 'oblique function', which, while founded on uneven planes and bodily disorientation, nevertheless resulted in the construction of several major works. Looking back, what do you think were the major achievements and disappointments of Architecture Principe and the theory of the oblique function?

PV: Architecture Principe was the name of a group. That period lasted five years in all (1963–8). You must know that this was at a time when many artists, philosophers and the like would come together to do things. For instance, we did quite a few things together with 'Archigram'. You also had Paulo Soleri in the United States, and there was also the 'Metabolic' group in Japan.<sup>11</sup> And so, Claude Parent and myself decided to start a research group together, and the main thing I contributed to was a church. That was the St Bernadette church in Nevers, and that church is a so-called 'Bunker church'. Why? Because I wanted to 'Christianize' the bunker. Of course, at the time, the prevailing myth was that of the crypt – the atomic shelter. One was then living under the permanent threat of the atomic bomb, and hence the atomic shelter. And so, you get a cross-point between the theme of St Bernadette of Lourdes, and that of the bunker. In Lourdes, the Virgin Mary appeared to St Bernadette in a grotto. Now, both the grotto and the bunker are crypts, hidden places, as in the English word, cryptic. And thus there was an opportunity to make a cross-over happen between that monolithic branch of architecture and a religious building. There is another reason: I had frequently been to Germany, to look at bunkers, and there I had seen a lot of so-called 'Luftschutzraum', air-shelters and, in Dusseldorf, I suddenly saw *Luftschutzraums* which had been converted into Protestant or Catholic churches. And a correspondence dawned on me as between these places of shelter from danger, and places of worship, which are also places of salvation. We had another big project, a factory, and we also designed a number of private homes with inclined planes. Now if you want me to explain the concept of the oblique function as succinctly as possible it is

this: simply to have people inhabit places with inclined, not horizontal, planes...

JA: And the disappointments?

PV: We published things. But, basically, this was a typical 'youth group'. And it broke up with the 'events' of May 1968. I was myself very much involved in those events, whereas Claude Parent was against the whole thing. So our ways parted, I went to the left, and he went to the right.<sup>12</sup>

JA: Much of your work in the late 1960s and early 1970s is overtly concerned with the idea of 'critical space'. Could you elaborate on this concept?

PV: Critical space is indeed a very important concept. You must see it as the direct outcome of me joining the École Spéciale d'Architecture, in 1968, at the formal request of the students there. And then, I immediately realized that the *prima materia* of the architect is not matter, bricks, stones and concrete, but space. And that it is necessary to construct space first before you can build up matter, with materials. Now, about the *critical* aspect of space: this means that space finds itself in a critical situation, just like one would speak of critical times, or of a critical situation. Space is under threat. Not only matter is threatened, space too is being destroyed. But it is being rebuilt at the same time. This is what I started to feel in the 1960s, and it was by then that I got the foreboding of cyberspace! I got the foreboding of virtual space, through Benoit Mandelbrot and the new geometry of fractals.<sup>13</sup> I came to see that the unity of space, which served as a basis for Le Corbusier, for the Archigram group, for all of us in sense, is in the process of being broken up. And the curious thing is that I published *The Lost Dimension* (1991b [1984]) in the same year as William Gibson published *Neuromancer* (1984). So here you have someone who writes on virtual space, on cyberspace, and someone who works on critical space. And both approaches will come to mesh into each other. To me, the reason why space is critical is because it is on the verge of becoming virtual space. Let me give you another example: whole dimensions no longer exist. For the modern architect, there exist the three dimensions, and time on top of them. This is what you might call 'ancient space'. It's modern space too, but it is conventional. From Mandelbrot onwards, dimensions are no longer whole, they are broken up. Space is fractured too. Nothing remains whole, as space, from approximately the 1970s onwards. And, to me, this is a great joy, since I am an anti-totalitarian. Newtonian absolute space disappears with the break up brought about by fractals, and by Einsteinian relativity in the first place, of course. The entire unity of space, which was the basis of architecture, modern architecture included, is deconstructed, fractionalized. This is what I call an 'accident'. It is a far better situation than that of totalitarian space. Geometry has now encountered its accident in fractalization.

JA: In *The Lost Dimension* and elsewhere, you present critical analyses of the nature of electronic space and the spread of new information and communications technologies. Why is it necessary to criticize, say, the Internet and cyberspace?

PV: I do not criticize the Internet and cyberspace as such. What I criticize is the propaganda unleashed by Bill Gates and everything that goes with it. What I loathe are the monopolies of Microsoft, of Time Warner, etc. I cannot stand those! I am an Apple fan, I am for Apple's convivial approach. I am not fretting against technology per se, but against the logic behind it. But first and foremost I'd like to position myself as an art critic of technology. Everybody is familiar with the conventional art critic, the musicologist. But art criticism of technology is a taboo. 'Yes and Amen' is the only allowed position. Well, not for me, thanks!

#### **Nietzsche, Derrida, Power**

JA: Although you were working on critical space in the late 1960s and early 1970s, it was also in that period when both structuralism and Marxism came under attack. Deconstructionists and post-structuralist philosophers like Jacques Derrida, for example, looked to Nietzsche rather than Marx for inspiration. Would it be correct to say that Nietzsche's philosophy is close to your own?

PV: It is true that I always have felt close to Deleuze and Derrida, who were very intimate friends, and Derrida still is, but I must confess that I have never been convinced by their 'Nietzscheanism'. I love 'Nietzschean music'. But, to me, Nietzsche is a man of the grand opera! His linkage with Wagner is not at all fortuitous. And I really admire the operatic part of Nietzsche. But his underlying philosophy? I'm sorry, I cannot stand it! It's physically repulsive! All that crap about the 'Uebermensch', and 'the Will to Power'! I do, though, profoundly admire the dramatic, the literary dimension, in Nietzsche. But I cannot assign any philosophical value to that brand of thinking. Here we encounter Shakespeare again. It is clear that I prefer Shakespeare to Nietzsche, by far. When I link Nietzsche's writings to the opera, it is because, to me, philosophy is spread out over the arts. Take Marcel Duchamp: for me, he is a philosopher who happens to paint. Shakespeare is a philosopher who writes plays. Kant is a philosopher who writes philosophical treatises. But philosophy transcends all this. When reading Nietzsche, I admire the literary music, the 'heroization' of concepts. As half Italian, I admire! I clap my hands! I love theatre! To me, Nietzsche is like Verdi. I applaud. But at the same time, I cannot, simply cannot, accept his philosophy. You see, I remain an art critic.

JA: Do you see any points of contact between your work and that of Derrida? Derrida (1984, 1996 [1995]) has, for instance, not only written on Nietzsche but also on speed and technoscience...

PV: No. The fact is that I do appreciate Derrida very much, but I do not encounter him. There are parallels in our work, but we do not share common ground. I cannot formulate it better. We are friends, but there are no points of contact in our writings.

JA: Earlier, you rejected the Nietzschean conception of power. How would you define power?

PV: This is a rather difficult type of question to respond to. The question of power is a long and vexed one. The ancient Chinese had an extraordinary phrase for it. When a representative of the Emperor would meet some local or regional power holder, his first words would be: 'Tremble and Obey!' To me, this is the best definition of power. Fear! That is, to instil fear, to frighten. The first thing power is about is fear, and from that compliance follows. Fear is of course also about emotions, about astonishment. And speed frightens. There is an awful lot more to say, naturally.

### **The Political Economy of Speed**

JA: Power and speed are central to perhaps what is your best known book, *Speed & Politics: An Essay on Dromology* (1986 [1977]). Could you explain the nature and significance of dromology?

PV: Dromology originates from the Greek word, *dromos*. Hence, dromology is the science of the ride, the journey, the drive, the way. To me, this means that speed and riches are totally linked concepts. And that the history of the world is not only about the political economy of riches, that is, wealth, money, capital, but also about the political economy of speed. If time is money, as they say, then speed is power. You see it with the velocity of the predators, of the cavalry, of railways, of ships and maritime power. But it is also possible to see it with the velocity of dispatching information. So all my work has been about attempting to trace the dromocratic dimension of societies from ancient Greek society right up to our present-day societies. This work is of course about unrelenting acceleration, but it is mostly about the fact that all societies are pyramidal in nature: the higher speeds belong to the upper reaches of society, the slower to the bottom. The wealth pyramid is the replica of the velocity pyramid. Examples are easy to find: it was true in ancient societies, through maritime power and cavalry, and through their ways of dispatching messages, and it holds true in our modern societies, through the transport revolution, and through the current revolution in data transport and information processing. Thus my work is all about stating that it is of paramount importance to analyse acceleration as a major political phenomenon, a phenomenon without which no understanding of history, and especially history-that-is-in-the-making since the 18th century is possible.

JA: In *Speed & Politics* you also suggest that successive waves of acceleration imply both the 'disappearance' of physical geographical space and a new politics of real time. What, for you, is the most important aspect of the relationship between the physical dimension and the political space of real time?

PV: Well, the old politics of acceleration were mainly about transport. That is, the possibilities inherent in moving goods from one place to another, or, perhaps equally importantly, moving *troops* from one point to another. This means that acceleration bore next to no relationship to information. You had pigeons, and other methods of despatching, but through the ages there was hardly any acceleration of information transmission. But today, that is, since the beginning of the 20th century, acceleration is mainly about the increasing speed of information transmission. Sure, transportation has been constantly speeded up too, but, today, the major development is the increasing speed of information transmission, and the quest for the attainment of real time. Information transmission is thus no longer concerned with the bringing about of a relative gain in velocity, as was the case with railway transport compared to horse power, or jet aircraft compared to trains, but about the absolute velocity of electromagnetic waves.

#### **Pure War and the Politics of Everyday Life**

JA: Your concerns about what might be called 'the dromocratic condition' led, in the late 1970s, to the publication of your *Popular Defense & Ecological Struggles* (1990 [1978]). This seems to me to be one of the few books of yours which, while discussing the theoretical concept of 'Pure War', also makes a *practical* political case for 'Revolutionary Resistance' against the tyranny of speed politics and, in particular, the military-industrial complex. Could you elaborate upon these concepts? Are they still relevant today?

PV: Here, one must state that the book might also have been titled *Pure War* (Virilio and Lotringer, 1997 [1983]) since that is the heading of the Introduction.<sup>14</sup> That was the time when we were living with the unadulterated balance of terror. What I mean is that one cannot understand the concept of pure war outside of the atomic bomb, the weapon of the apocalypse. At that time, and this has been somewhat forgotten, we were living with the potentiality of a pure war, which, nevertheless, failed to materialize. What is pure war? It is a war of a single utterance: Fear! Fear! Fear! Nuclear deterrence can be conceived of as pure war for the simple reason that nuclear war never took place. However, such deterrence did spawn a technoscientific explosion, inclusive of the Internet, and other satellite technologies. And so one saw that the history of warfare, of siege war, of the war of movement, of total war, of world war, all somehow merged into pure war. That is, into a blockade, into nuclear deterrence. What had been reached was the dimension of the integral accident, the moment of the

total destruction of the world. And there it stopped. Thus, at that stage, the whole concept of resistance to war became a new phenomenon. It was no longer about resisting an invader, German or other, but about resisting the military-scientific and industrial complex. Take my generation: during the Second World War you had resistance, combat against the Germans who invaded France. During the 1960s and 1970s there was resistance, among others by me, not against an invader, but against the military-industrial complex, that is against the invention of ever crazier sorts of weapons, like the neutron bomb, and 'Doomsday machines', something that we saw, for instance, in Stanley Kubrick's film, *Dr Strangelove*. Thus resistance to pure war is of another nature than resistance to an oppressor, to an invader. It is resistance against science: that is extraordinary, unheard of!

JA: At this point, I would like to ask a question on behalf of my students. For when I give a lecture on your work there is one question that comes up over and over again at the end of the session. It usually runs something like this: 'While I find Paul Virilio's analyses of pure war, and revolutionary resistance against the military-industrial complex extremely thought-provoking, I'm not quite sure what he is suggesting I actually *do* about these issues at the political level, at the level of the everyday?' What, in your view, should one tell them?

PV: Well, tell them the following. I was a militant against the atomic bomb. I joined leftist movements during the events of May 1968. But I must say that I became very disappointed about political struggles, since they appear to me to lag very much behind developments both within the post-industrial revolution and technoscience. Thus I am, and many people with me, out of phase with real existing political movements. I feel henceforth marginalized, and the only action I can partake in takes place within the urban realm, with homeless people, with travellers, with people whose lives are being destroyed by the revolution brought about by the end of salaried work, by automation, by delocalization. You may call it street-corner work in a sense. For instance, together with Abbé Pierre, I was member of the High Committee for the Housing of Destitute People that was instituted by President [François] Mitterrand and [Jacques] Chirac. I was on that Committee for three years. That work has stopped now, but, for the last 15 years, I have been a member of private associations which work together with homeless people. These are Christian associations for the most part, and there lie my political activities these days. I am a disappointed man of the left. By the way, this is no fun because at the same time there is the rise of extremist political parties like [Jean-Marie] Le Pen's Front National, and so on.

### Modernity and 'Globalitarianism'

JA: If we can broadly define modernity as an attempt to understand the present period by contrasting it with the recent past, what key features, *other*

than speed, would you point to in the contemporary era as being of most political significance?

*PV:* Globalitarianism! This is what transcends totalitarianism. Let's take an example, and excuse the neologism, but I cannot find another word. Totalitarianism covered my life, through the Second World War and through the period of nuclear deterrence, so you may say through Nazism first and then Stalinism. Totalitarianism was thus a central issue at that time. But now, through the single market, through globalization, through the convergence of time towards a single time, a world time, a time which comes to dominate local time, and the stuff of history, what emerges – through cyberspace, through the big telecommunications conglomerates, is a new totalitarianism, a totalitarianism of totalitarianism, and that is what I call globalitarianism. It is the totalitarianism of all totalities. Globalization, in this sense, is a truly important event. But, when people say to me, 'We'll become world citizens!', I reply, 'Forget it'. I was a world citizen long before globalization. After the war, I met Gary Davis, I went to meetings which took place in the Père Lachaise neighbourhood of Paris. I was 16–17–18 at that time. I was half Italian, I felt a world citizen. But when people say that Bill Gates, cyberspace and VR are the stuff of world citizenship, I say, no way! Globalitarianism is social cybernetics. And that's something infinitely dangerous, more dangerous even, perhaps, than the Nazi or communist brands of totalitarianism. It is difficult to explain globalitarianism but it is simple enough in itself. Totalitarianisms were singular and localized. Occupied Europe, for example, was one, the Soviet empire another, or China. That's clear. The rest of the world was not under totalitarianism. Now, with the advent of globalization, it is everywhere that one can be under control and surveillance. The world market is globalitarian. It is on purpose that I use the doublet total/totalitarian, and global/globalitarian. I consider this phenomenon a grave menace. It is manifest that Time Warner and the large conglomerates like Westinghouse, MCIWorldCom and all the other gigantic companies are not the exact equivalent of Hitler or Stalin. Yet, bad things are possible...

*JA:* Undoubtedly, I believe that one of the leading microelectronics conglomerates has even adopted 'One World, One Operating System' as its corporate logo...

*PV:* Yes. I can't stand it. Let me remind you of a sentence by Saint Just, one of the main protagonists of the French Revolution who got guillotined in the end, and who said once: 'There's this new idea in Europe: happiness.' Well, his other phrase, which I like very much is: 'If the people can be oppressed, even if they are not actually oppressed, then they are oppressed already.' It is a very interesting statement, because it says that the possibility is already the reality. Even if you are unaware of it, it has already happened. Hence the menace in the present period.

### Lyotard

JA: Shortly after the publication of *Popular Defense & Ecological Struggles*, Jean-François Lyotard published his seminal book *The Postmodern Condition* (1984 [1979]). Does this book's renowned scepticism about the possibility of historical understanding, along with its rejection of the 'grand narratives' of progress, have any significance for you?

PV: Well, yes. We see here the fractalization of history, and Lyotard expressed – at an early stage – the end of the grand ideological narratives. But then, there was a question put by a Jewish friend of mine, Gerard Rabinowich – it was just after the book's publication, and we had gathered among friends in St Germain des Prés. My friend asked: 'Well, Lyotard, what do you have to say about that grand narrative called justice? Is that too a grand narrative belonging to the past?' A fine point indeed! Needless to say, Lyotard was at a loss for an answer. And indeed, to me, even if I accept the demise of the grand historical and ideological narratives in favour of the small narratives, the narrative of justice is beyond deconstruction. If that was the case, I would not be a Christian. You cannot deconstruct the absolute necessity of justice. Hence that issue remains intact. Justice cannot be divided up, be fractalized, on pain of descent into barbarism. We have reached a limit there.

### Speed and Inertia

JA: While some cultural theorists are sympathetic to your critique of speed, few of them appear to appreciate the stress you place on the relationship between absolute speed and its 'Other' – *inertia*? Indeed, you have written a book about speed and the environmental crisis entitled *Polar Inertia* (1999 [1990]). Why is speed inextricably bound up with inertia?

PV: That is quite simple. When what is being put to work are relative speeds, no inertia obtains, but acceleration or deceleration. We are then in the realm of mobility and emancipation. But when absolute speed, that is the speed of light, is put to work, then one hits a wall, a barrier, which is the barrier of light. Let me remind you that there exist three recognized barriers: the sound barrier, which was passed in 1947 by Chuck Jaeger, the barrier of heat, which was crossed in the 1960s with rockets, at what is called 'escape velocity' and, finally, the speed of light, which is the effectuation of the 'live' in almost all realms of human activity. That is, the possibility to transfer over distance sight, sound, smell and tactile feeling. Only gustation, taste, seems to be left out of it. From that moment onwards, it is no longer necessary to make any journey: one has already arrived. The consequence of staying in the same place is a sort of Foucauldian imprisonment, but this new type of imprisonment is the ultimate form because it means that the world has been reduced to nothing. The world is reduced, both in terms of surface and extension, to nothing, and this results in a kind of incarceration,



in a stasis, which means that it is no longer necessary to go towards the world, to journey, to stand up, to depart, to go to things. Everything is already there. This is, again, an effect of relativity. Why? Because the earth is so small. In the cosmos, absolute speed amounts to little, but at that scale, it is earth which amounts to nothing. This is the meaning of inertia. There is a definite relationship between inertia and absolute speed which is based on the stasis which results from absolute speed. Absolute stasis leads – potentially – to absolute stasis. The world, then, remains ‘at home’ [in English], already there, given. I repeat: this is a possibility, a potentiality, but here we are back to what I said before: when the people are in a situation of possible inertia, they are already inert.

### **The Integral Accident**

JA: You said before that ‘modernity will only come to a halt within the ambit of the integral accident’...

PV: Indeed, the accident has always fascinated me. In fact, I am currently preparing my end-of-the-century book, the one for the year 2000, which will be on the integral accident, although I am writing another book before that. The integral accident is the one that integrates all others.

JA: Could you elaborate on the concept of the integral, or, generalized accident, a little further?

PV: Let me put it this way: every time a technology is invented, take shipping for instance, an accident is invented together with it, in this case, the shipwreck, which is exactly contemporaneous with the invention of the ship. The invention of the railway meant, perforce, the invention of the railway disaster. The invention of the aeroplane brought the air crash in its wake. Now, the three accidents I have just mentioned are specific and localized accidents. The *Titanic* sank at a given location. A train de-rails at another location and a plane crashes, again, somewhere else. This is a fundamental point, because people tend to focus on the vehicle, the invention itself, but not on the accident, which is its consequence. As an art critic of technology, I always try to emphasize both the invention and the accident. But the occurrence of the accident is being denied. This is the result of the hype which always goes together with technical objects, as with Bill Gates and cyberspace, for instance. The hype in favour of technology dismisses its negative aspects. It is a positive thing to have electricity, it is a wonderful device, but at the same time it is based on nuclear energy. Thus what these three types of accidents have in common is that they are localized, and this is because they are about relative velocities, the transport velocities of ships, trains and planes. But from the moment that the absolute velocity of electromagnetic waves is put to use, the potential of the accident is no longer local, but general. It is no longer a particular accident, hence the possibility arises of a generalized accident. Let me stress the

point by giving you two examples: the collapse of the stock exchange and radioactivity as result of a nuclear conflict. These examples mean that when an event takes place somewhere today, the possibility arises that it might destroy everything. A virus in an electronic network, an atomic leakage in Chernobyl – and that was not much, compared to a massive nuclear strike. Today's collapse of the stock exchange is a nice icon for the integral accident, in the sense that a very small occurrence changes everything, as the speed of quotations and programmed trading spreads and enhances any trend instantaneously. What happened a few weeks ago in [South East] Asia is an integral accident, well, almost an integral accident.

### The Aesthetics of Disappearance

JA: In works such as *The Aesthetics of Disappearance* (1991a [1980]) you argue that modern culture is not simply characterized by speed but also by what you call the 'aesthetics of disappearance'. What is the relationship between speed and the aesthetics of disappearance?

PV: These are the cinematic effects, which are characteristic of the contemporary arts, and stem from film, television, video, etc. Let me explain: in ancient societies you had an aesthetic of *appearance*, which means that there was an enduring material support to the image: wood or canvas in the case of paintings; marble, in the case of sculptures, etc. Save for music, most aesthetics-related phenomena were phenomena of appearance, of emergence. Painting enabled the emergence of a figure on the canvas, which was subsequently 'fixed' with a varnish, for example, Leonardo's *Mona Lisa*. The image had appeared, as it were, through the medium of the canvas. The same could be said of Michelangelo, shaping *Moses* out of a block of marble, and that block of marble, suddenly *becoming* Moses. Persistence had a material basis. But with the invention of photography, of the photogramme, that is of instant photography, and of cinematography, from that moment onwards, one enters into an aesthetic of disappearance. At that stage, persistence is no longer material but cognitive, it is in the eye of the beholder. Things owe their existence to the fact that they disappear, like they do on a screen for instance. They are there, they appear, and are in motion, *because* they vanish afterwards. Quite different, therefore, from frescoes, paintings, etc. It is a sequential phenomenon. In the first phase, there was a cinematic effect of painting: if you take snapshots of an artist at work, you see that the painting develops in stages. But this is a very slow cinematic phenomenon as opposed to the film where we are talking about 24 frames per second – even up to 60 frames per second with special effects. So, this is the aesthetics of disappearance, it means that most of the art has vanished. Hence, by the way, the current crisis in contemporary art. Hence, too, 'the art of the motor'. When I write about *The Art of the Motor* (1995 [1993]), I mean that there has been a motorization of art. And, by 'motor', I mean the French cinematographic word '*moteur*', for 'action'! This motorization of art is a very important phenomenon, and you cannot come to grips

with the current crisis in the contemporary arts – I am thinking of *documenta* in Kassel, among others – without it (Joly, 1996). All branches of the arts are involved in this motorization, that is, in acceleration.

JA: So, you are arguing that the crisis in the contemporary arts is the direct outcome of motorization?...

PV: Yes, it is the result of the motorization of images. Let's take ships, for instance, and compare the grace of a sail-boat with a motor vessel: you're not talking about the same kind of marine vessel any longer. The same holds true for figurative images: whether they are from paintings, or from photo stills, or the cinema, or video: it's not the same. You must see that. Meanwhile, photography and cinema have influenced painting. They have also influenced the theatre, and other realms too. Motorization has exerted its influence over art in general. Every time there is a gain, there is a loss too. By losing the slow pace of the revelation of things, we have lost one sense of time in favour of another. Let me give you another example: the moment we acquired the mechanical lift, we lost the staircase. It became the service or emergency staircase, and was no longer the magnificent grand staircase of old. But we gained in speed – as is always the case. When transatlantic air services were invented, we incurred the loss of the ocean liners. This holds true in all possible realms.

### **Foucault and Baudrillard**

JA: Much of your recent work is concerned with cyberspace and imaging technologies of various kinds such as VR. However, it appears to be less influenced by Jean Baudrillard's writings on the nature and impact of *Simulations* (1983) and 'hyperreality,' and more by Foucault's work on surveillance in *Discipline and Punish: The Birth of the Prison* (1977 [1975]). Why is this?

PV: *Discipline and Punish* is the source, obviously. Let me remind you that when Foucault published *Discipline and Punish*, one of his collaborators – he had quite a few of them at the time – was Jacques Donzelot. And Jacques Donzelot happened to sit on the examination board of one of my students who was doing research on prisons. We were working on prisons together, on the panopticon and so on, as part of the college curriculum at the time, and that was before *Discipline and Punish* came out. The proof of that is that the illustrations provided in Foucault's book can be directly traced to my student's thesis! His name, incidentally, is Carthoux, and his thesis – for the Ecole Spéciale d'Architecture – was entitled 'The Place of Detention'. So, whether there is mutual influence or not, there are, again, clear parallels. Another link is of course my work about war and its particular field of perception.

Now, as far as Baudrillard is concerned, there is for sure something about his work that I have never liked at all, and that is his concept of

simulation. I do not believe in simulation. To me, what takes place is substitution. Seminars have already been convened on this theme. The reason why is that I believe that different categories of reality have unfolded since the beginning of time, from the Neolithic Age to the present day. This means that reality is never given, but is the outcome of a culture. And thus we have a category of 'class I reality', and then there is a simulation of that reality, through a new technology, such as photography, or some other thing, or VR, for instance, and then you have a fresh substitution, a second reality. Hence simulation is a mere intermediary phase, without import. What is important is substitution; how a class I reality is substituted by a 'class II reality', and so on, up to the 'nth' reality.

*JA:* For you, then, one class of reality is continually substituted by other realities?

*PV:* Well, reality is produced by a society's culture, it is not given. A reality that has been produced by one society will be taken over, and changed by another, younger society, producing a fresh reality. This happens first by mimicry, then by substitution, and the original reality will, by that time, be totally forgotten. Take, for instance, the reality of the ancient Egyptians, of the Chinese of thousands of years ago: we cannot make any sense out of it, we are clueless about what it looked like, about what it sounded like.

*JA:* You talked before of the 'disappearance aesthetic'. At the same time, Baudrillard suggests that the advent of simulation and hyperreality have led to the 'disappearance of the social'. Isn't there some kind of connection between your work and his?

*PV:* Absolutely none whatsoever. As I have said and repeated often: there is a nihilistic dimension in Baudrillard's writings which I cannot accept. It is quite clear to me that Baudrillard has totally lost faith in the social. To me, this is sheer nihilism. I have not at all lost faith in the social. First of all, I believe that the social eludes the so-called social sciences, and always has – that's why I am not a sociologist! So I am disappointed, and very much so, about politics, but I am not disappointed by the social. You need only to go into the streets, and meet the poor: they're extraordinary, superior people. The social drama leaves the stunts of the political class far behind. The power and resilience of individual people in the streets puts the intelligence of today's political leaders to shame. And as far as the social scientists are concerned, the less said the better!

### **Technological Culture**

*JA:* Would you say that your work on the aesthetics of disappearance is characterized by a disenchantment with the modern world? Do you advocate a return to some kind of religious sensibility, one that might place limits, for instance, on the social effects of cinematic disappearance?

PV: I believe that, without some religious culture, it doesn't matter which, one will never be able to understand technological culture and cinematics. I believe that a society, a society which has moved to such an extent into virtuality, will not be able to advance further, without an appreciation of moral virtues, that is, of mystical thought. I mean by that all that has been contributed by philosophers and theologians, of all religions, not only Christianity. The new technologies bring into effect the three traditional characteristics of the Divine: ubiquity, instantaneity and immediacy. Without some cultural familiarity with these themes, mediated by Christianity, Protestantism, Buddhism, Judaism, Islam, etc., they remain incomprehensible. One cannot come to grips with the phenomenon of cyberspace without some inkling of, or some respect for, metaphysical intelligence! That does not mean that you have to be converted. I believe that the new technologies demand from those who are interested in them that they have a substantial measure of religious culture – not merely some religious opinion. I may emphasize that all this has nothing to do whatsoever with 'New Age', and the like...

JA: Don't you think that some people invest technology with a mystical dimension already?

PV: Yes, of course. 'Transhumans', New Age types, cyberpunks and the like. There are plenty of them in the United States, you need only to read Mark Dery's book.<sup>15</sup> I think this is a scary development, leading up to the Heaven's Gate sect, whose members committed suicide in order to depart for the stars. But this is not the sort of thing I am talking about. My point is simply that without a knowledge of the history and philosophy of religions, one cannot come to grips with what I have termed 'technological fundamentalism'. Which is the possibility of a *Deus ex Machina*. Just like there is a Jewish fundamentalism, or an Islamic or Christian one, you have also now got a technological fundamentalism. It is the religion of those who believe in the absolute power of technology, a ubiquitous, instantaneous and immediate technology. I think a balance is needed to remain free vis-a-vis technology, a balance which consists of a knowledge of religion, even if this entails the risks of fundamentalism and intolerance. Without this knowledge one is without balance, and one cannot face the threats of technological fundamentalism, of cyberspace and of the extreme lunacy of social cybernetics.

### **The War Model**

JA: To many people, your work in *Bunker Archeology* and later is associated with what has come to be known as 'the war model'. Could you explain this model?

PV: Well, as a child of the Second World War, a 'war baby', you may say that the war was my university. I learned to know the world through the fear

height-lines established, whereupon the artillery was told where to fire. But at the close of the war, maps were being displaced by aerial photography, shot by planes and then assembled on tables like mosaics – I did that kind of job myself, when I was a HQ staffer. How did that come about? Well, because the destructive power of artillery is such that the ordinary topographical landmarks simply disappear – here, again, the aesthetics of disappearance at work! Only film or photography keep the memory of the landscape as it was, and as it is constantly being reshaped. The film substitutes for the ordnance survey and, at the same time, architecture goes underground. It buries itself in the soil, in bunkers, in order to escape control from the skies. If you look at the Second World War, there was no bombing without photographs of the planned bomb site being taken back, being scrutinized with specialized equipment. Images thus become a product of extraordinary strategic importance. And if we switch to contemporary military conflicts, what you get are video missiles, unmanned miniature planes or ‘drones’, observation satellites and more wondrous things. War has morphed into images, into the eyes...

JA: According to you, war is now a war of images?

PV: Absolutely. It is impossible to imagine war without images. And, if possible, ‘live’ images.

### **Cyberwar in the Persian Gulf**

JA: Your reflections on the so-called ‘cyberwar’ in the Persian Gulf were published as *L’Écran du desert* (1991c). What, for you, are the qualitative differences between conventional warfare and cyberwar?

PV: First, about the book’s title. It is very important because there were three phases in the Gulf War. Two are well-documented, and the third has been named by myself: ‘Desert Shield’, ‘Desert Storm’ and then, ‘*Desert Screen*’ – the latter is my invention. You may say the title is ‘War TV’. The Gulf War was truly a war of images. This is because it was fought out, on the one hand, with drones, that is, with flying cameras on unmanned planes. On the other hand, one also saw Cruise missiles, which were making surveys all the time about where they were flying, with televised bombs which were streaming into Saddam’s bunkers, with video missiles. A jet fighter pilot turns on his screen, fires a missile equipped with a camera, and the missile lights up what is on the horizon, while the pilot sees *beyond* the horizon. And, as soon as he sees an adversary, he directs the missile towards him. We have, therefore, now entered a type of war which is about directing images, hence the invention of C<sup>3</sup>I – a type of war management which means command, control, communication and intelligence – a kind of (film) director’s way of running a war, with images and information coming up from everywhere at once. One observes that in the very first armed conflict after the Cold War, the image is right in the middle of the mechanism. The

brought about by war. So for me the archetypal war was the Second World War, which lasted from 1939 to 1945. This war produced both Auschwitz and Hiroshima – in fact I keep a stone from Hiroshima on my desk. The war model is a method of total control over a territory and of a population. The aim is to have total control of the population, to bring a whole region or a continent into subjection, through radio, telephone, and a combination of both of these was already very much there during the Second World War. Hence my work is about defining total war as a conflict model, in all realms, not only in the realm of the military, but also in the realm of the social, and in what I would call ‘colonization’. Colonization is already a model of total war. To quote [Jules] Michelet, the 19th-century French historian: ‘Without a powerful navy, there are no colonies.’ It is the power of technology which makes colonization possible; maritime power is one. Later, other forms of colonial power followed. Thus it is clear that my writings on the war model are linked to the history of the colonial empires, that is, to the times of colonial imperialism and ideological totalitarianism.

JA: Does the notion of the war model flow only from the Second World War? Or, is it linked in some way to your resistance to the Algerian war? Or both?

PV: What is for sure is that, as far as my approach to war is concerned, I have passed through three stages in my life: I suffered from the Second World War as a child; I was called into military service during the Algerian War and served six months in Algeria – in the Aurès, the mountainous region south of Constantine. And I opposed nuclear war, that is, the total war *par excellence*. So the three wars that have moulded me, we could say, are the Second World War, the Algerian war and the epoch of nuclear deterrence. These wars, of course, carry the seeds of their followers, especially the Malvinas War and the Persian Gulf War.

### **The War of Images**

JA: In the early 1980s you produced one of your most well-known books, *War and Cinema: The Logistics of Perception* (1989a; [1984]). In this book you discuss the use by the military of cinematic technologies of perception. Why is the analysis of the relationship between war and the cinema so important for you?

PV: Because images have turned into ammunition. Logistics deals in the first place with the supply to the front-line of ammunition, energy and so on. The front-line is constantly being replenished with ammunition, energy and foodstuffs. Now, from the end of the First World War onwards, but especially with the Second World War, the front-line is also being fed with images and information. That means that a ‘logistics of perception’ will be put in place, just as there is a logistics of fuel supplies, of explosives and shells. For instance, one can observe that the First World War was fought on the basis of maps. Maps were being drawn, lines were sketched on them and

war is being directed straight from the USA, through communication satellites which are guiding the Patriot missiles. There is a kind of video-game war going on. This perfectly illustrates what I wrote seven years before in *War and Cinema*. In fact, quite a few friends told me that they couldn't make anything out of my book in 1984 but now, after the Gulf War, they tell me that they have got the message – seven years too late. So when there is talk today about the 'new war', the 'info war', the war of information, well, now we are in quite an uncharted territory.<sup>16</sup> It is quite clear that the USA is currently entering a period of great upheaval in military affairs. This means that the command of 'globalitarian', or total information, by the last remaining Big Power, leads to a repositioning of its powers. What we now see happening in its relations with Iraq goes a long way to show the limitations of this war of information, as far as the 'how-far-to-go', 'what-to-do', issues are concerned. It is very difficult to make pronouncements about these developments, save to say that 'cyberwar' manoeuvres have already taken place in Germany, and have been witnessed by my friend James Der Derian.<sup>17</sup> Here we enter a realm of electronic gamesmanship of which very little can be said. It's still quite tricky, and confidential. I am presently working on that, of course, but there is simply not very much open information about this war of information. What is certain is that the locale of war is no longer the 'geosphere', military geography, the realm of geostrategy, but the 'infosphere', cyberspace. We have entered a new world.

### **The War Machine: Deleuze and Guattari**

*JA*: Before we leave the subject of war, could I ask you about your relationship to Deleuze and Guattari's philosophy and politics of desire? Their 'Treatise on Nomadology: The War Machine', in *A Thousand Plateaus: Capitalism and Schizophrenia* (1987 [1980]) is obviously influenced by your writings about pure war, military space, speed and power. But what, if anything, have you learnt from their writings and how has it influenced your thinking?

*PV*: I do not think there is influence here but, rather, convergence. If you care to look in *A Thousand Plateaus*, I believe there are 27 references to my work. That's not nothing. Now, I am not stating this in order to claim as my own the qualities of Deleuze and Guattari, whom I have loved very much, but to emphasize that, here again, there were parallels at work. However, I felt rather closer to Deleuze than to Guattari because I am totally devoid of any psychoanalytic background or culture. Guattari and I were, though, on extremely friendly terms, and we did things together. You see, Deleuze was, like me, a man of 'the event', someone who not only worked with the concept of the event but who also rose to the occasion when an event occurred and who reacted with feeling, as befits a phenomenologist. Hence, to me, the interest of *A Thousand Plateaus* lies chiefly in its liberating effect from a certain kind of academic discourse, one which belonged to the end phase of structuralism. I am not talking about Foucault here. I am referring to



[Claude] Lévi-Strauss, to [Louis] Althusser and so on. Here, again, liberation took on a kind of musical hue. For me, *A Thousand Plateaus* is also a form of, shall we say, '*ritornello*' (a recurring couplet or refrain in a folk song), as they called it themselves. So what I like about Deleuze and Guattari is their poetic language, a language which enables them to convey meanings which cannot be conveyed otherwise...

JA: Do you mean that Deleuze and Guattari have a poetic understanding of the world, as opposed to a prosaic or an analytical one?

PV: Yes, but even better, a 'nomadological' understanding of the world – they have that word of their own after all – stemming from the fact that the world is constantly on the move. Today's world no longer has any kind of stability; it is shifting, straddling, gliding away all the time. Hence their ideas about superimposition, strata, layers and cross-currents. Ours is a world that is shifting, like the polar ice-cap, or 'Continental Drift'.<sup>18</sup> Nomadology is thus an idea which is in total accordance with what I feel with regard to speed and deterritorialization. So, it is hardly surprising that we clearly agree on the theme of deterritorialization.

### **The Gaze of the Machine**

JA: Your interest in the acceleration and automation of perception was further developed in *The Vision Machine* (1994b [1988]). What was your central aim in that book?...

PV: There was, for me, this crucial development, of which nobody, once again, seemed aware of. Everybody was talking about Orwellian remote control and surveillance, with cameras all over the place, scanning the city. I agree, it is scary, the Orwell scenario, police cameras everywhere. But there is something worse, which gives its title to *The Vision Machine*: a device to see with. For it means that an inanimate object now can see *for itself*. A remote camera, for example, is for the use of a policeman or a security guard. There is someone behind it who does the viewing. Nothing special about that and nothing to worry about. But behind the vision machine there is nobody. There is only a micro-receiver, and a computer. A door can 'recognize' me, as it were. This set up without a human spectator means that there is now vision without a gaze. And let me remind you that the research on the vision machine – that is its official name, I did not invent it – was for the Cruise missile! Cruise missiles were equipped with detection radar and built-in mapping systems. They had maps charting their course towards Teheran or Leningrad. The device was constantly surveying the ground with radar and checking it against the map to make sure the missile was on course. No need for a vision machine here, the radar does the work. But, at the final approach stage, a vision machine is necessary, in order to film the target and choose the window to enter the building or the door to the bunker. These vision machines are an improvement on what are called

‘shape recognition devices’. They are like those industrial machines that punch holes in metal sheets. They come equipped with a microchip that enables them to recognize the shape of the sheet they’re supposed to punch holes in. This is termed contour recognition, which is not fully fledged vision yet. A further development has led to the devising of highly sophisticated vision machines for Cruise missiles. This means that Cruise missiles are endowed with a gaze even though it is an automatic one . . .

JA: But all this is not being carried out for the machines themselves. It is being carried out by, or at least on behalf of, human beings, even if none are directly involved? . . .

PV: No, nobody is there. Well, ultimately, yes, of course, but when you’ve got a camera, you make a film, and then you view it. Here the object is looking *for itself*, the Cruise missile looks for itself. To me, something like this is an unheard of event. Imagine this table we are sitting around starting to look for itself!

### **The Transplant Revolution**

JA: In *The Art of the Motor* (1995 [1993]) another shift seems to take place in your thinking. For, in that work, you focus on the invasion of the human body by technoscience. Could you explain your interest in what you call ‘the transplant revolution’?

PV: Oh yes, this is the ‘Third Revolution’. In the realm of speed, the first revolution was that of transportation, the invention of the steam engine, the combustion engine, the electrical motor, the jet engine and the rocket. The second revolution is the revolution of transmission, and it is happening right now in electronics, but it began with Marconi, radio and television. The third revolution, which is intimately linked to the miniaturization of objects, is the transplantation revolution. By this term I mean that technology is becoming something physically assimilable, it is a kind of nourishment for the human race, through dynamic inserts, implants and so on. Here, I am not talking about implants such as silicon breasts, but dynamic implants like additional memory storage. What we see here is that science and technology aim for miniaturization in order to invade the human body. This is already true of the cardiac stimulator, a device I am especially interested in, since much of my work is about rhythms and speed, and the cardiac stimulator is what *gives* the rhythm to the life of a human patient. I am writing about that in my next book, and about the case of those twin sisters, which were prematurely born, and who had a cardiac stimulator implanted in them practically from birth: their life-rhythm, thus, is that of a machine, a stimulator. Here is an icon of the transplant revolution, of the human body being eaten up, being possessed by technology. Technology no longer spreads over the body of the territory, as with railways, motorways, bridges and large factories, but now enters the innards of the human body . . .

JA: And, in your view, this is a negative development?

PV: It is absolutely scary. It means that the machine enters into the human. It is no longer a prosthesis, it is a new eugenicism in fact...

JA: Nonetheless, this is a difficult position to maintain with someone whose life may depend upon the insertion of a cardiac stimulator?

PV: Well, here again you see how the indisputable is always put forward in order to foster extremely dubious measures. It all starts by saying how great those things are for people who need them, and then comes the day when it is being forced upon people who don't need or want them. There lies the problem.

JA: Is this the basis of your criticisms, in *The Art of the Motor*, (1995 [1993]) of the Australian performance artist Stelarc?

PV: Yes. This is because Stelarc has opted for 'eugenic suicide'. Instead of committing plain suicide, he does so by grafting himself into various gizmos, so that in the end, there will be no Stelarc left, pffuuut!, gone! Only a pure automaton will remain. That being said, his work is absolutely fascinating.

JA: How does the transplant revolution relate to your concept of 'endo-colonization'?

PV: First, endo-colonization happens when a political power turns against its own people. I have lived through this during the Second World War. Totalitarian societies colonize their own people. You cannot understand Nazi Germany without accounting for the fact that it had been deprived of colonies and embarked on a programme of colonization at home. So Germany's colonization was a programme of colonizing the East (*ostkolonization*), inclusive of Poland, Russia and France for that matter. But, by necessity, Germany's colonization was also a logic of endo-colonization, that is, to force upon its own population the fate that the British – or the French – had forced upon the Aborigines in Australia or the blacks in South Africa, or, in other words, brute force. And, in the case of the transplant revolution, what takes place is an endo-colonization of the human body by technology. The human body is eaten up, invaded and controlled by technology...

JA: Are you suggesting that the idea of the transplant revolution is identical to the concept of endo-colonization?

PV: Yes, it is, but on the person, on the human body. There is no colonization without control of the body. We are here back to Foucault, evidently. Every time a country is being colonized, bodies are colonized. The body of the Negro, of the slave, of the deportee, of the inmate of the labour camp, is a

*colonized body*. Thus technology colonizes the world, through globalitarianism, as we have seen earlier, but it also colonizes bodies, their attitudes and behaviours. You need only to watch all those nerdy ‘internaut’ types to see to what extent their behaviour is already being shaped by technology. So we have this technology of absorption, or as the Futurists used to say: man will be fed by technology, and technology will colonize human behaviour, just as television and the computer are doing, but this last form of colonization is a much more intimate, and a much more irresistible form. This is scary! It is neo-eugenicism, endo-technological eugenicism!

### **Cyberfeminism**

JA: In *Open Sky* (1997 [1995]) you make reference to ‘cyberfeminism’, a movement which some see as one of the most important theoretical and political developments in the past decade with regard to our understanding of the human body, technology and subjectivity. Could you describe your response to these developments?

PV: Well, I have become very interested in the notion of ‘cybersexuality’. Even if it is still at the gimmick stage, it is a well-known fact that research is very advanced in the field of ‘tele’, ‘remote’ or cybersexuality, especially in Japan. And thus, I am quite baffled to see feminists – far from opposing, like I do, the conditioning of the female body, or the male body for that matter – projecting themselves as followers of cybersexuality. I cannot understand it. I cannot understand why opposing machismo does not also imply opposing cybersexuality. Do the cyberfeminists really believe that cybersexuality is going to liberate them? Come on. ... Give me a break!

JA: Are you arguing that feminists have much more to lose than they have to gain by embracing cybernetic technologies?

PV: I believe that the question of technology is predicated upon the question of sexuality, be it male or female. If cyberfeminists do not want to understand the replacement of emotions by electrical impulses – because that is what we are talking about – the replacement of emotional involvement by electrical impulses, it is clear that they will never be liberated. Instead, they will become the servants of a new type of sexual control. Remote or tele-sexuality is by definition machine-controlled sexuality.

JA: The American cyberfeminist, Donna Haraway (1985) has stated that she ‘would rather be a cyborg than a goddess’. What is your reaction to such claims?

PV: (laughs – out loud) I want to be neither a God nor a cyborg! I want to be man. It suffices to be a man – or a woman. As I said before, ‘Man is the endpoint of the wonders of the universe’!

### Giorgio Agamben

JA: One final question. Are there any other cultural theorists writing today whose work you admire?

PV: Hm, this is a difficult question to answer, but, yes, there is one book which I've just reviewed, and liked very, very much. It is Giorgio Agamben's *Homo Sacer: le pouvoir souverain et la vie nue* (1997). In ancient Roman law *Homo Sacer* means a human being whose life is considered worthless, meaning someone whom one could kill without committing homicide, and who is also unfit for sacrificial purposes. Such a man stands condemned to summary execution. Killing him is no worse than squashing an insect. I must say I have a boundless admiration for Agamben. I was asked by several papers to give my choice of the best books of the year and I mentioned *Homo Sacer*. It is a remarkable book, and one with which I could not agree more.

*Translated by Patrice Riemens*

### Notes

1. This interview was conducted on 27 November 1997 at the Ecole Spéciale d'Architecture in Paris. I would like to thank Mike Featherstone for his encouragement, Ken Harrop for personal and institutional support, and Mark Little for practical help in setting up the interview. However, I am also heavily indebted to Magali Fowler for interpretation and to Rob Turner and Patrice Riemens for translating numerous letters, tapes and texts. Lastly, I am especially grateful to Paul Virilio for giving his time and energy so freely to this project.
2. See, for example, Kerrigan (1997: 14–15).
3. Gestalt psychology is a body of thought which springs from the experimental studies conducted by German psychologists like Max Wertheimer and Kurt Koffka around 1910. Briefly, the Gestaltists argued that philosophical, artistic, scientific, perceptual and aesthetic configurations endowed with qualities as a whole could not be characterized simply as the totality of their parts.
4. 'Hypermodernism' is a term I reserve for a forthcoming book on Virilio.
5. Here, Virilio is referring to Daniel Halévy (1872–1962). Halévy was an anti-clerical radical French historian and well-known 'Dreyfusard'.
6. Paul Dirac and Werner Heisenberg were both instrumental in developing Einstein's theory of relativity and quantum mechanics in the early part of this century. For a recent and accessible introduction to this fascinating but complex field see Milburn (1996). Henri Bergson (1859–1941) founded a philosophy based on 'creative evolution' and, like Virilio, was much preoccupied with questions relating to the nature of knowledge, time and religion. See, for instance, Bergson (1910).
7. Abbé Pierre is a figure held in high regard in France for his championing of the poor.
8. See, inter alia, Marcel (1950) and Ellul (1965).

9. Sir Francis Galton coined the term eugenics in 1883. Eugenics is, of course, the 'science' which purports to 'improve' humanity through the application of genetic policies.
10. Robert Morris (1931– ) is an American minimalist sculptor and Land artist. However, in recent years he has turned increasingly to figurative painting. For a general overview that includes Morris' work, see, for example, Lucie-Smith (1995: 74–133).
11. Archigram is the name of an English utopian architectural group, founded in 1960 by Peter Cook (1974). It disbanded in 1975. Paulo Soleri (1919– ) is an Italian architect who, since the 1950s, has worked in the USA on alternative planning schemes at the Cosanti Foundation in Scottsdale, Arizona (see Wall, 1971). The science fiction inspired Metabolic Group in Japan was initiated by Kenzo Tange (see Kurokawa, 1972).
12. For a somewhat different explanation of the break up of Architecture Principe see, I. Scalbert and M. Mostafavi, 'Interview with Claude Parent', in Johnston (1996: 49–58).
13. See, for instance, Mandelbrot (1977).
14. As indicated in the references below, *Pure War* (1997) is the title of a recently revised book-length interview with Virilio conducted by Sylvère Lotringer. The English edition of *Popular Defense & Ecological Struggles* (1990 [1978]) does not contain an Introduction.
15. Virilio is referring to Dery (1996).
16. 'Info War' is the title of the Postscript in the new edition of *Pure War* (Virilio and Lotringer, 1997: 165–86).
17. See, for example, Der Derian (1992).
18. 'Continental Drift' is the title of a chapter in *Open Sky* (1997 [1995]).

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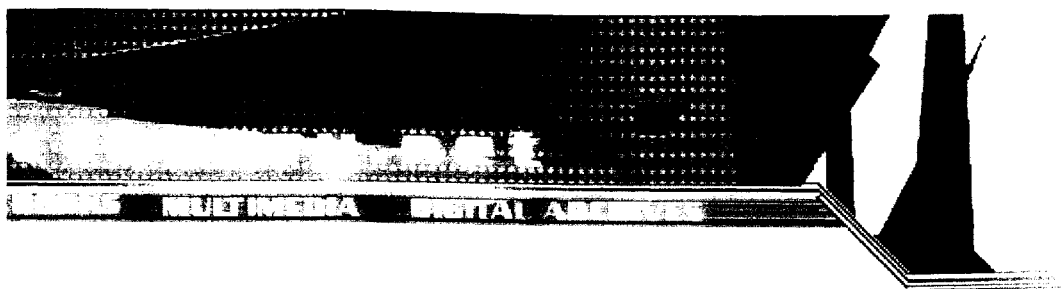
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**Paul Virilio** is Director of the École Spéciale d' Architecture in Paris.

**John Armitage** teaches at the Division of Government & Politics, University of Northumbria at Newcastle, United Kingdom.



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## Beyond Postmodernism?

### Paul Virilio's Hypermodern Cultural Theory

*John Armitage*

**Paul Virilio** is one of the most significant French cultural theorists writing today.<sup>1</sup> Increasingly hailed as the inventor of concepts such as 'dromology' (the 'science' of speed), Virilio is renowned for his declaration that the logic of acceleration lies at the heart of the organization and transformation of the modern world. However, Virilio's thought remains much misunderstood by many postmodern cultural theorists. In this article, and supporting the ground-breaking work of Arthur and Marilouise Kroker, I shall evaluate the contribution of Virilio's writings by suggesting that they exist *beyond* the terms of postmodernism and that they should be conceived of as a contribution to the emerging debate over 'hypermodernism'. Consequently, the article details Virilio's biography and the theoretical context of his work before outlining the essential contributions Virilio has made to contemporary cultural theory. In later sections an appraisal of Virilio's hypermodernism, together with a short evaluation of the controversies surrounding Virilio's work, will be provided before the conclusion.

### The World According To Paul Virilio

**Born in Paris** in 1932 to a Breton mother and an Italian Communist father, Virilio was evacuated in 1939 to the port of Nantes, where he was traumatised by the spectacle of Hitler's *Blitzkrieg* during World War II. After training at the Ecole des Metiers d' Art in Paris, Virilio became an artist in stained glass and worked alongside Matisse in various churches in the French capital. In 1950, he converted to Christianity in the company of 'worker-priests' and, following military conscription into the colonial army during the Algerian war of independence (1954-1962), Virilio studied phenomenology with Merleau-Ponty at the Sorbonne. Captivated by the military, spatial, and organizational features of urban territory, Virilio's early writings began to appear while he was acting as a

self-styled 'urbanist', in *Architecture Principe* (Virilio and Parent, 1996), the group and review of the same name he established with the architect Claude Parent in 1963. Although Virilio produced numerous short pieces and architectural drawings in the 1960s, his first major work was a photographic and philosophical study of the architecture of war entitled *Bunker Archeology* (1994a [1975]). The creator of concepts such as 'military space', 'dromology', and the 'aesthetics of disappearance', Virilio's phenomenologically grounded and controversial cultural theory draws on the writings of Husserl, Heidegger, and, above all, Merleau Ponty.<sup>2</sup> After participating in the *evenements* of May 1968 in Paris, Virilio was nominated Professor by the students at the Ecole Speciale d' Architecture, and he later helped Jacques Derrida and others to found the International College of Philosophy. An untrained architect, Virilio has never felt compelled to restrict his concerns to the spatial arts. Indeed, like his philosopher companions, the late Michel Foucault, Gilles Deleuze, Felix Guattari and Jean-Francois Lyotard, Virilio, like his current sympathetic adversary, Jean Baudrillard, has written numerous texts on a variety of cultural topics. Commencing with *Speed & Politics: An Essay on Dromology* (1986 [1977]) before moving on to *The Aesthetics of Disappearance* (1991a [1980]), *War and Cinema: The Logistics of Perception* (1989 [1984]), *Politics of the Very Worst* (1999a [1996]), *Polar Inertia* (1999b [1990]), *The Information Bomb* (2000a [1998]) and, most recently, *Strategy of Deception* (2000b [1999]), the power of Virilio's cultural theory has only recently begun to be felt in the English-speaking world. This situation is probably due in no small part to the fact that, despite receiving several international speaking invitations weekly, he rarely leaves Paris and seldom converses in public outside France. Virilio retired from teaching in 1998. He currently devotes himself to writing and working with private organizations concerned with housing the homeless in Paris.

**The importance of** Virilio's theoretical work stems from his central claim that, in a culture dominated by war, the military-industrial complex is of crucial significance in debates over the creation of the city and the spatial organization of cultural life. In *Speed & Politics*, for example, Virilio offers a credible 'war model' of the growth of the modern city and the development of human society. Thus, according to Virilio, the fortified city of the feudal period was a stationary and generally unassailable 'war machine' coupled to an attempt to modulate the circulation and the momentum of the movements of the urban masses. Therefore, the fortified city was a political space of habitable inertia, the political configuration, and the physical underpinning of the feudal era. Nevertheless, for Virilio, the essential question is why did the fortified city disappear? His rather unconventional answer is that it did so due to the advent of ever increasingly transportable and accelerated weapons systems. For such innovations 'exposed' the fortified city and transformed siege warfare into a war of *movement*. Additionally, they undermined the efforts of the authorities to govern the flow of the urban citizenry and therefore heralded the arrival of what Virilio (Virilio and Parent, 1996: xv) calls the 'habitable circulation' of the masses. Unlike Marx, then, Virilio postulates that the transition from feudalism to capitalism was not an economic transformation but a military, spatial, political, and technological metamorphosis. Broadly speaking, where Marx wrote of the materialist conception of history, Virilio writes of the

military conception of history.

**Beginning in 1958** with a phenomenological inquiry into military space and the organization of territory, particularly concerning the 'Atlantic Wall' — the 15,000 Nazi bunkers built during World War II along the coastline of France to repel any Allied assault — Virilio deepened his explorations within the *Architecture Principe* group. An absolutely crucial but somewhat overlooked aspect of Virilio's work from the beginning is his continuing allegiance to a psychologically based *gestalt* theory of perception.<sup>3</sup> This theory was not only chiefly responsible for Virilio and Parent's development of the concept of the 'oblique function' but also for their construction of the 'bunker church' in Nevers in 1966 and the Thomson-Houston aerospace research centre in Villacoubly in 1969 (Johnson, 1996). Later, Virilio broadened his theoretical sweep, arguing in the 1970s, for example, that the relentless militarization of the contemporary cityscape was prompting what Deleuze and Guattari (1988: 453) call the 'deterritorialization' of capitalist urban space and what Virilio terms the arrival of speed or *chronopolitics*. Reviewing the frightening dromological fall-out from the communications technology revolution in information transmission, Virilio investigated the prospects for 'revolutionary resistance' to 'pure power' and began probing the connections between military technologies and the organization of cultural space. Consequently, during the 1980s, Virilio cultivated the next significant phase of his theoretical work through aesthetically derived notions of 'disappearance', the 'fractalization' of physical space, war, cinema, logistics, and perception. Further, as Arthur Kroker (1992: 20-50) has suggested, throughout the late 1980s and early 1990s, Virilio critically examined the cultural repercussions of the use of remote-controlled and cybernetic technologies in the rapidly accelerating urban environment of 'techno' or 'crash' culture. Tracking the 'third age of military weaponry' in the shape of new information and communications technologies such as the Internet, Virilio's post-Einsteinian cultural theory is presently focused on the idea of 'polar inertia', the 'third', or, 'transplant revolution', Stelarc's cybernetic performance art, and the Persian Gulf and Kosovo wars.<sup>4</sup> Nonetheless, a significant strand of his current thinking is also centred on Virilio's critical conception of 'endocolonization', 'cyberfeminism', 'technological fundamentalism', 'the information bomb', and 'the strategies of deception'.

**Although there can** be no doubt that Virilio has made a significant contribution to the Krokers' (Kroker and Kroker, 1997; Armitage, 1999) initial development of 'hypermodern' cultural theory, it is important to stress that Virilio characterizes himself as a 'critic of the art of technology' and not as a cultural or social theorist (Virilio and Lotringer, 1997: 172). In fact, for the most part, Virilio abhors cultural theory and sociology in particular. Still, let us consider his theoretical writings by looking first at Virilio's contribution to our understanding of the oblique function, dromology, and the 'integral accident'.

## Virilio's Contribution To Cultural Theory

**Virilio's early work** focused on the oblique function — a proposed new

urban order based on 'the end of the vertical as an axis of elevation, the end of the horizontal as permanent plane, in favour of the oblique axis and the inclined plane' (Virilio and Parent, 1996: v). Such writings also foreshadowed Virilio's military and political critiques of deterritorialization and the revolution in information transmission that surfaced in *Bunker Archeology*, his as yet untranslated *L'Insecurite du territoire* (1976) and *Speed & Politics*. Moreover, it is these themes that make Virilio's current writings of interest to contemporary postmodern cultural theorists like Bauman (1999: 120) and 'global information culture' theorists such as Lash (1999: 285-311).

**Virilio's doubts about** the political economy of wealth are primarily driven by his 'dromocratic' conception of power. Considering Von Clausewitz's *On War* (1997 [1832]) to be outmoded, Virilio is decisively influenced by Sun Tzu's ancient Chinese text, *The Art of War* (1993). Debating with himself about war, the 'positive' (Fascist) and 'negative' (anti-Fascist) aspects of Marinetti's artistic theory of Futurism, Virilio suggests that political economy cannot be subsumed under the political economy of wealth, with a comprehension of the management of the economy of the state being its general aim. Indeed, for him, the histories of socio-political institutions such as the military and artistic movements like Futurism show that war and the need for speed, rather than commerce and the urge for wealth, were the foundations of human society. It is important to state that Virilio is not arguing that the political economy of wealth has been superseded by the political economy of speed, rather, he suggests that 'in addition to the political economy of wealth, there has to be a political economy of speed' (Zurbrugg, 2001: forthcoming.) Hence, in *Popular Defense & Ecological Struggles* (1990 [1978]) and *Pure War* (Virilio and Lotringer, 1997 [1983]), Virilio developed his dromological investigation to include considerations on pure power — the enforcement of surrender without engagement — and revolutionary resistance — Virilio's case against the militarization of urban space. The 'rationale' of pure war might be encapsulated as the logic of militarized technoscience in the epoch of 'Infowar'. For Virilio, the epoch of Infowar is an era in which unspecified civilian 'enemies' are invoked by the state in order to justify increased spending on the third age of military weaponry and, in particular, in the form of new information and communications technologies such as the Internet. Thus, for Virilio, in the post-Cold War age, the importance of the military-industrial complex — or what he calls the '**military-scientific complex**' is not decreasing but increasing (Armitage, 2001a: forthcoming. Original emphasis.) For the weapons of the military-scientific complex are not merely responsible for integral accidents like the 1987 world stock market crash, accidents brought about by the failure of automated program trading, but also for the fact that, 'in the very near future' it **'will no longer be war that is the continuation of politics by other means, it will be the integral accident that is the continuation of politics by other means'** (Armitage, 2001a: forthcoming. Original emphasis.)

In *The Aesthetics of Disappearance* and *The Lost Dimension* (1991b [1984]), Virilio, a devotee of Mandelbrot's (1977) geometry of fractals, argues that cultural theory must take account of interruptions in the rhythm of human consciousness and 'morphological irruptions' in the

physical dimension. Using his concept of 'picnolepsy' (frequent interruption) and Einstein's General Relativity Theory, he suggests that modern vision and the contemporary city are both the products of military power and time-based cinematic technologies of disappearance. Furthermore, although there are political and cinematic aspects to our visual consciousness of the cityscape, what is indispensable to them is their ability to designate the technological disappearance of Lyotard's (1984) grand aesthetic and spatial narratives and the advent of micro narratives. In Virilio's terms, Mandelbrot's geometry of fractals reveals the appearance of the 'overexposed' city — as when the morphological irruption between space and time splinters into a countless number of visual interpretations, and 'the crisis of whole dimensions' (Virilio, 1991b [1984]: 9-28). Important here is that Virilio's concerns about the aesthetics of disappearance and the crises of the physical dimension are not exercised by the textual construction of totalizing intellectual 'explanations'. Rather, they are exercised by the strategic positioning of productive interruptions and the creative dynamics of what he, following Churchill, calls the 'tendency' (Virilio, 1989 [1984]: 80). As Virilio maintains in *The Lost Dimension*, the rule in the overexposed city is the disappearance of aesthetics and whole dimensions into a militarized and cinematographic field of retinal persistence, interruption, and 'technological space-time'. Speaking recently about the overexposed city within the context of the 'totally bogus' court cases surrounding O. J. Simpson and the death of Princess Diana, Virilio suggested that, today, "all cities are overexposed". London, for example, "was overexposed at the time of Diana's burial" while "New York was overexposed at the time of Clinton's confessions concerning Monica Lewinsky". (Armitage, 2001a: forthcoming. Original emphasis.)

In *War and Cinema*, Virilio applies the idea of 'substitution' when discussing the different kinds of reality that have appeared since the beginning of time. Bearing a remarkable similarity to Baudrillard's (1983) concept of 'simulation', Virilio's chief concern is with the connection between war, cinematic substitution and what he calls the 'logistics of perception' — the supplying of cinematic images and information on film to the front line. The importance of the concept of the logistics of perception can be seen in the context of 'post' and 'hyper' modern wars like the Persian Gulf War of 1991 and the Kosovo War of 1998-9. For in these kinds of conflicts not only do settled topographical features 'disappear' in the midst of battle but so too does the architecture of war. Indeed, the military high command has only two choices. It can entomb itself in subterranean bunkers with the aim of evading what one of Coppola's helicopters in the film *Apocalypse Now* announced as 'Death from Above'. Or, alternatively, it can take to the skies with the intention of invading what Virilio has dubbed in the CTHEORY interview, 'orbital space'. Conceptualising a logistics of perception where 'the world disappears in war, and war as a phenomenon disappears from the eyes of the world', Virilio has thus been analysing the relationship between war, substitution, human and synthetic perception since the 1980s, particularly in texts such as *L'écran du désert: chroniques de guerre* (1989 [1984]: 66; 1991c).<sup>5</sup> Virilio's interests in war, cinema and the logistics of perception are primarily fuelled by his contention that military perception in warfare is comparable to civilian perception and, specifically, to the art of filmmaking. According to Virilio, therefore,

cinematic substitution results in a 'war of images', or, Infowar. Infowar is not traditional war, where the images produced are images of actual battles. Rather, it is a war where the disparity between the images of battles and the actual battles is 'derealized'. To be sure, for Virilio, wars are 'no longer about confrontation' but about movement — the movement of 'electro-magnetic waves'. (Armitage, 2001a: forthcoming.) Similar to Baudrillard's (1995) infamous claim that the Gulf War did not take place, Virilio's assertion that war and cinema are virtually indistinguishable is open to dispute. Yet Virilio's stance on the appearance of Infowar is consistent with his view that the only way to monitor cultural developments in the war machine is to adopt a critical theoretical position with regard to the various parallels that exist between war, cinema, and the logistics of perception. It is a view he developed in his trenchant critique of *The Vision Machine* (1994b [1988]).

In Virilio's universe, therefore, people 'no longer believe their eyes'. For him, 'their **faith in perception**' has become 'slave to the faith in the technical **sightline**', a situation in which contemporary substitution has reduced the 'visual field' to the 'line of a sighting device' (1994b [1988]: 13. Original emphases.) Viewed from this angle, *The Vision Machine* is a survey of what I have called 'pure perception' (Armitage, 2000a: 3). For, today, the military-scientific complex has developed ominous technological substitutions and potentialities such as Virtual Reality and the Internet. In Virilio's terms, 'the main aim' of pure perception is '**to register the waning of reality**'. The aesthetics of disappearance is a form of aesthetics that is derived from 'the unprecedented limits imposed on subjective vision by the instrumental splitting of modes of perception and representation' (1994b [1988]: 49. Original emphases.) Hence, Virilio conceives of vision machines as the accelerated products of what he calls 'sightless vision' — vision without looking — that 'is itself merely the reproduction of an intense blindness that will become the latest and last form of industrialisation: **the industrialisation of the non-gaze**' (1994b [1988]: 73. Original emphasis.) Virilio further details the far-reaching cultural relationships between vision and remote-controlled technologies in *Polar Inertia*.

In *Polar Inertia*, Virilio examines pure perception, speed, and human stasis. In 'Indirect Light', for example, Virilio considers the difference between the video screens recently adopted by the Paris Metro system and 'real' perceptual objects such as mirrors from a theoretical perspective that broadly conforms to what Foucault (1977) called 'surveillance societies' and Deleuze (1995) labelled 'control societies'. In contrast, other articles note the discrepancy between technologically generated inertia and biologically induced human movement. Discussing the introduction of 'wave machines' in Japanese swimming pools, the effacement of a variety of 'local times' around the world and their gradual replacement by a single 'global time', Virilio notes the disparity between 'classical optical communication' and 'electro-optical commutation'. In the era of pure perception, though, Virilio argues that it is not the creation of acceleration and deceleration that becomes important but the creation of 'Polar Inertia'. Here, Virilio proposes that in the early modern era of mobility, in his terms the era of emancipation, inertia did not exist. The idea of polar inertia thus excludes what would

have been alternate aspects of the speed equation — simple acceleration or deceleration — in the industrial age. Yet, as Virilio has been arguing since the 1980s, in the post-industrial age of the absolute speed of light, real time has now superseded real space. In such circumstances, the geographical difference between 'here' and 'there' is obliterated by the speed of light as history itself 'crashes into the wall of time'. (Armitage, 2001a: forthcoming.) Additionally, in its terminal mode, as exemplified by reclusive billionaires such as the late Howard Hughes, polar inertia becomes a kind of Foucauldian incarceration. Holed up in a single room in the Desert Inn hotel in Las Vegas for fifteen years, endlessly watching Sturges' *Ice Station Zebra*, Hughes, Virilio's 'technological monk', was not only polar inertia incarnate but, more importantly, the first inhabitant of a 'mass phenomenon'. Equally significantly, for Virilio, this phenomenon has stretched far beyond domestic cinema and TV audiences and on into the global war zone. In fact, according to him, in recent conflicts such as the one in Kosovo, the army now 'watches the battle from the barracks'. As he puts it, "today, **the army only occupies the territory once the war is over.**" (Armitage, 2001a: forthcoming.) At the broadest level, then, Virilio's writings on polar inertia seek to show that large tracts of civilian and military physical geographical spaces no longer have significant human content. Therefore, in *The Art of the Motor* (1995 [1993]), Virilio turned his attention to the relationship between the spaces of the human body and technology.

**At the beginning** of the twenty-first century, then, Virilio's cultural theory is concerned with what he calls the third, or, the *transplant revolution* — the almost total collapse of the *distinction between the human body and technology*. Intimately linked to the technological enhancement and substitution of body-parts through the miniaturisation of technological objects, the third revolution is a revolution conducted by militarized technoscience against the human body through the promotion of what the Virilio calls 'neo-eugenics'. Such developments range across Virilio's (1995 [1993]: 109-112; Armitage, 2001a: forthcoming) criticisms of the work of Stelarc, the Australian cybernetic performance artist, to his concerns about the eventual fate of the jet-pilots in the Kosovo war. This is because, for Virilio, both Stelarc and the jet-pilot represent much the same thing: "the last man before automation takes command". (Armitage, 2001a: forthcoming.) Nevertheless, it should be stressed that Virilio's criticisms of automation are closely connected to the development of his concept of endo-colonization — what takes place when a political power like the state turns against its own people, or, as in the case of militarized technoscience, the human body.

**As a result**, in *Open Sky* (1997 [1995]), *Politics of the Very Worst*, and *The Information Bomb*, Virilio has elaborated a critique of cyberfeminism that Plant (1997), following Haraway's (1985) 'manifesto for cyborgs', describes as a revolution on the part of cybernetic technology and feminists against the rule of patriarchy. Nonetheless, Virilio has little time for cyberfeminism or 'cybersex'; notions that he criticises, likening cybersex, for example, to the technological replacement of the emotions (Armitage, 2000b: 5). For Virilio, it is imperative to reject cybernetic sexuality, refocus theoretical attention on the human subject, and resist



the domination of both men and women by technology. According to Virilio, cyberfeminism is merely one more form of technological fundamentalism — the religion of all those who believe in the absolute power of technology (Virilio and Kittler, 1999.) Having departed from the religious sensibility required in order to understand the contemporary Gods of ubiquity, instantaneity, and immediacy of new information and communications technologies, cyberfeminists, along with numerous other cultural groups, have thus capitulated to the raptures of cyberspace.

**Virilio's newest work**, though, is *Strategy of Deception*. Focusing on the Kosovo War, Virilio argues that while war was a failure both for Europe and for NATO it was a success for the United States (US). In the world according to Virilio, this is because the US conducted an 'experiment' on Kosovo using the informational and cybernetic tools of the Pentagon's much-hyped 'Revolution in Military Affairs' (RMA). The RMA is thus a revolution that Virilio perceives to be analogous to his conception of 'the information bomb' and cyberwar as well as his contention that the present aim of the US is to seek what its military chiefs term Global Information Dominance (GID).

**Virilio's exegesis** of military space and the social organization of territory is an important contribution to critical cultural theory because it diverges from the increasingly sterile current debate over the differentiation of modernism and postmodernism. It is, for instance, quite wrong of critical cultural theorists such as Harvey (1989: 351), Waite (1996: 116), and positivist physicists like Sokal and Bricmont (1998: 159-166) to characterise Virilio's thought as postmodern cultural theory. Indeed, such characterisations are so far wide of the mark it is difficult to know where to begin. I will explain.

**For one thing**, although the concept of postmodernism, like Virilio, came to prominence in architectural criticism in the 1960s, Virilio's thought is neither a reaction against the International Style nor a reaction against modernism. Postmodernism, Virilio proposes, has been a 'catastrophe' in architecture, and has nothing to do with his phenomenologically grounded writings (Armitage, 2000b: 25.) This is because Virilio's work draws on the modernist tradition in the arts and sciences. As I have noted elsewhere, in *The Information Bomb*, Virilio routinely references modernist writers such as Kafka and relishes the latter's declaration that 'the cinema involves putting the eye into uniform'. The same could be said of Virilio's combative relationship to both Marinetti's modernist Futurism and the Chapman brothers' postmodern or 'terminal' contemporary art practices (Armitage, 2000c: 146; and 2000d). Virilio's philosophical reference points are Husserl and Merleau-Ponty, phenomenologists and modernists. Furthermore, he regularly cites Einstein's writings on General Relativity Theory, instances of Virilio's commitment to the theory of scientific modernism established in 1915.

**For another**, Virilio sees no connection between his thought and that of deconstructionist and poststructuralist theorists like Derrida (Armitage, 2000b: 34-5.) Virilio has, for example, never shown any interest in de Saussure's structural linguistics, preferring to this day the

world of phenomenology and existentialism. As an anti-Marxist (and anti-Sartrean), committed 'anarcho-Christian' and thinker who has 'absolutely no confidence in psychoanalysis' Virilio has little in common with the pioneers of structuralism such as the semiologist Barthes, the Marxist philosopher Althusser, the psychoanalyst Lacan, and the anthropologist Levi-Strauss (Virilio and Lotringer, 1997 [1983]: 39.) Virilio's theoretical connections with Foucault's *Discipline and Punish* and Deleuze and Guattari's *A Thousand Plateaus* also need to be treated with care. This is because, unlike most poststructuralist theorists, Virilio is a *humanist* and a practising Christian. His work is vehemently opposed to the viewpoint of anti-humanism and to the philosophy of Foucault's and Deleuze and Guattari's messiah, Nietzsche. As Virilio recently exclaimed, while he admires the '*operative part of Nietzsche*' he '*cannot stand*' his '*underlying philosophy*'. Indeed, for Virilio, it's 'physically repulsive!' (Armitage, 2000b: 34.) Thus, there are only indeterminate and convergent relationships between Virilio's thought and Foucault and Deleuze and Guattari's poststructuralist theories, something that Virilio has pointed out before (Virilio and Lotringer, 1997 [1983]: 44-5.) For Virilio, the crucial pointers on all his cultural theory have been World War II, military strategy, and spatial planning (Armitage, 2000b: 26.)

**Moreover, in contrast** to many postmodern cultural theorists, Virilio does not wholly condemn modernity. Instead, he views his work as a 'critical analysis of modernity, but through a perception of technology which is largely ... catastrophic, not catastrophist'. Arguing that 'we are not out of modernity yet, by far', it is, then, 'the drama of total war' that lies at the core of Virilio's cultural theory (Armitage, 2000b: 26.) Concentrating his thought on the varying speeds of modernity, Virilio's texts thus concern themselves with its important characteristics such as technoscience, surveillance, urbanism, and alienation. In addition, and despite his reputation as a Cassandra, Virilio often insists that his conception of modernity, as distinct from the theorists of postmodernism, is essentially optimistic (Zurbrugg, 2001: forthcoming.)

**Furthermore, Virilio is** not wholly antipathetic to reason, even if he is critical of aspects of the 'Enlightenment project'. Yet, he certainly is inimical to Hegelian and Marxist theories of knowledge and ideology. In this respect, Virilio can be considered as a kind of 'left Heideggerian' (Kellner, 2000: 118.) Virilio's critical relationship to modernity is, then, somewhat removed from the description of it given by postmodern cultural theorists like Waite although a useful recent discussion of Virilio's ideas about the Enlightenment, technological objects, modernity and rationality can be found in Lash's work, *Another Modernity, Another Rationality*.

**Lastly, Virilio's thought** has almost nothing to do with that of advocates of postmodernism like Lyotard or Baudrillard. Unlike Lyotard's writings, for instance, Virilio's work remains true to the principle of hope with regard to making sense of history — even as it crashes headlong into the wall of real time. Actually, nearly the entirety of Virilio's work is a sustained attempt to make sense of his own history and, through it, ours too. Nor does Virilio accept the demise of all the 'metanarratives', insisting in interviews, for example, 'that the narrative

of justice is beyond deconstruction' (Armitage, 2000b: 39.) Likewise, Virilio's hostility to Marxism, semiotics, and Nietzschean 'nihilism' explains his antagonism toward Baudrillard's concept of simulation. Again, and while Genosko (1999: 96) may well be correct that Virilio's hypotheses on speed are 'consonant with McLuhan's' the truth is that, unlike many postmodern cultural theorists, Virilio does *not* share Baudrillard's admiration for McLuhan's (1994) 'drooling' (Virilio, 1995 [1993]: 10; Armitage, 2001b: forthcoming) over new media technologies. Genosko (1999: 97), for instance, argues that the 'differences between Virilio and McLuhan are profound', particularly with respect to their 'representations of the drive toward automation'. 'The war machine of Virilio and the love machine of McLuhan', Genosko (1999: 97) rightly concludes, 'create quite different kinds of worlds: contest or contact'. Virilio's war machine is therefore neither concerned with Baudrillard's conception of 'hyperreality' and 'irony' or with McLuhan's love machine. In fact, Virilio's thought is more concerned with the historical, socio-cultural, technoscientific and military realities of everyday life.

**It is therefore** very difficult to appraise the important advances of Virilio's thought in terms of postmodern cultural theory. It is also why I believe it is preferable to interpret it as the work of a cultural theorist whose thinking addresses what might be called the question of *hypermodernism, or, the cultural logic of contemporary militarism*. All the same, hypermodernism remains a tentative term and an embryonic tendency in cultural theory today. Arguably, it began with the publication of Kroker's *The Possessed Individual*. Nevertheless, in the present period, I want to suggest that, along with Virilio, it is necessary to move away from the polarised assumptions of modernism and postmodernism. Why? Because it is imperative to shift toward an understanding of Virilio's work on acceleration through the 'excessive' intensities and displacements inherent within hypermodern cultural thought about the military-scientific complex (Armitage, 2000a.)<sup>7</sup>

## A Brief Critique Of Virilio

**Virilio's cultural theory** and numerous activities have courted controversy since the 1960s. When Virilio and Parent built their 'bunker church', — and which has to be seen to be believed — the bishop who consecrated it was, according to Virilio, muttering to himself the following words: 'what a ghastly thing! Amen! What a ghastly thing! Amen!' As Virilio tells the story: 'the priest turned towards the bishop and said: "Monsignor, this is not an exorcism! It is a consecration!"' (Armitage, 2001a: forthcoming.) Religious criticisms of Virilio and Parent's architecture aside, there have also been a number of recent academic critiques of Virilio's ideas concerning the state, technology, and speed. Deleuze and Guattari (1988: 351-423), for instance, attempted what Crogan (1999) calls a problematic effort to 'subsume' Virilio's thought into their own poststructuralist approach to cultural theory. But, as Crogan suggests, Deleuze and Guattari's 'static, ahistorical model' of the state and technology cannot easily be combined with Virilio's writings without undoing 'its own coherency in the process'. In turn, Virilio's *The Aesthetics of Disappearance* has outraged

the neo-Marxian geographer Harvey (1989: 293, 299, and 351; 2000: 88). For Harvey, Virilio's 'response' to what the former recently called the 'theme of time-space compression' 'has been to try and ride the tiger of time-space compression through construction of a language and an imagery that can mirror and hopefully command it'. Harvey places the 'frenetic writings' of Virilio (and Baudrillard) in this category because 'they seem hell-bent on fusing with time-space compression and replicating it in their own flamboyant rhetoric'. Harvey, of course, has 'seen this response before, most specifically in Nietzsche's extraordinary evocations in *The Will To Power*'. Yet, in *The Aesthetics of Disappearance*, Virilio's unfolding and wholly intentional reactions to the emergence of the dromocratic condition are actually concerned with 'the importance of interruption, of accident, of things that are stopped as *productive*' (Virilio and Lotringer, 1997 [1983]: 44. Original emphasis.) As Virilio told Lotringer: 'It's entirely different from what Gilles Deleuze does in *Milles Plateaux*. He progresses by snatches, whereas I handle breaks and absences. The fact of stopping and saying, "let's go somewhere else" is very important for me' (Virilio and Lotringer, 1997 [1983]: 45.) What Virilio's 'frenetic writings' actually substantiate throughout the 1980s are the material and, crucially, the *immaterial* consequences of dromological changes in aesthetics, military power, space, cinema, politics, and technology. In an era increasingly eclipsed by the technologically produced disappearance of cultural life, war, matter, and human perception, this is a very significant achievement. In the contemporary era, though, the limitations of Virilio's cultural theory are likely to rest not — as Harvey suggests — with his similarities but with his *differences* from Nietzsche. As Waite (1996: 381-2. Original emphases.), quoting the American performance artist Laurie Anderson, has argued:

**Virilio still desperately** holds on to a modicum of modernist *critique* of postmodern military tactics, strategies, and technologies, whereas Nietzsche basically would have been impatient with mere critique, moving quickly to *appropriate* them for his own *use*, at least conceptually and rhetorically, as metaphors and techniques of persuasion to preserve power for elites over corpses — 'now that the living outnumber the dead'.

## Conclusion

**Although there are** many controversial questions connected to Virilio's cultural theory, his hypermodern critique of military tactics, strategies, and technologies is beginning to collide with the thought of a growing number of other cultural theorists such as the Krokers' (1997). The reason for such collisions is that Virilio's texts like *The Politics of the Very Worst*, *Polar Inertia*, *The Information Bomb*, and *Strategy of Deception* address some of the most disturbing and significant contemporary cultural developments of our time. Moreover, such developments are often designed to preserve the power of the increasingly virtual 'global kinetic elites' over the creation of the actual local corpses of what I call 'the (s)lower classes'. A child of Hitler's *Blitzkrieg*, Virilio has theorised the cultural logic of contemporary militarism. This is the most important aspect of his thought. Revealing

the dromological and political conditions of the twenty-first century, Virilio interprets modernity in terms of a military conception of history and the endo-colonization of the human body by militarised technoscience. As I have indicated, the concept of hypermodernism needs to be uppermost in any understanding of Virilio's particular contribution to cultural theory.

**Virilio is, therefore,** one of the most important and thought-provoking cultural theorists on the contemporary intellectual battlefield. Just the same, unlike Lyotard's or Baudrillard's postmodernism, Virilio's hypermodernism does not articulate itself as a divergence from modernism and modernity but as a critical analysis of modernism and modernity through a catastrophic perception of technology. It is for these and other reasons that Virilio defines his general position as a critic of the art of technology. Virilio's theoretical position and cultural sensibilities concerning technology thus remain *beyond* the realm of even critical cultural theory. He does not depend on intellectual 'explanations' but on 'the obvious quality of the implicit' (Virilio and Lotringer, 1997 [1983]: 44.) On the one hand, therefore, Virilio is a cultural theorist who movingly considers the tendencies of the present period. On the other, he is a cultural theorist who utterly rejects cultural theory.

**Hence, it is** debatable whether there is much to be gained from cultural theorists attempting to establish the 'truth' or otherwise of Virilio's thought. For Virilio's critical responses to the military, chronopolitics, cinema, art, and technology are actually ethical and emotional responses to the arrival of technological culture. However, it is crucial to remember that Virilio's responses are not the passive responses of the armchair critic. As he emphasises in the CTHEORY interview, '[r]esistance is *always* possible! But we must engage in resistance first of all by developing the idea of a *technological culture*'. Virilio is of course also aware that his work is 'often dismissed in terms of scandalous charges!' As he has noted, in France '[t]here's no tolerance' for 'irony, for wordplay, for argument that takes things to the limit and to excess' (Zurbrugg, 2001: forthcoming.) Hence, to raise the question of Virilio's cultural theory is to raise the question of whether, outside France, his work should be dismissed in terms of scandalous charges, received in terms suffused with praise, or a mixture of both? In short, it is to raise the question of how much tolerance there is in the English-speaking world for irony, for wordplay, and for arguments that take things to excess? Attempting to answer such complex questions will ensure that Virilio's hypermodern cultural theory continues to elicit theoretical argument and social debate for many years to come.

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### Notes

1. This article is a substantially revised version of an earlier conference paper of the same title presented at the *3rd International Crossroads in Cultural Studies Conference*, Birmingham UK.
2. For a useful and accessible overview of the works of all three thinkers see Kearney (1986.)

3. Gestalt psychology originated in Germany at the start of the twentieth century. Founded by Wertheimer, Kohler and Koffka, 'gestaltists' believe that mental phenomena are extended 'events', or 'gestalts'. For Gestaltists, cognitive processes cannot be comprehended in terms of their individual components. Instead, for them, when some new piece of information is acquired, an individual's entire perceptual field is changed forever. Virilio's own particular influence is Guillaume (1937.)
4. Virilio considers the Internet to be a constituent feature of the 'third age of military weaponry' or what he sometimes calls *The Information Bomb* (Virilio, 2000a [1998].)
5. Virilio's *L'ecran du desert: chroniques de guerre* (1991) is currently being translated into English as *Desert Screen: War at the Speed of Light* by Michael Degener. The Athlone Press will publish the book in 2001.
6. For an alternative conception of hypermodernism to the one presented here see, for instance, Albert Borgmann's *Crossing the Postmodern Divide* (1993.)
7. For an attempt to develop Virilio's work via a conception of excessive hypermodern cultural and economic thought and the military-scientific complex see, Armitage and Graham (2001: forthcoming.)

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John Armitage is Principal Lecturer in Politics and Media Studies at the University of Northumbria, UK. The editor of *Paul Virilio: From Modernism to Hypermodernism and Beyond* (2000), he is currently editing *Virilio Live: Selected Interviews* for publication in 2001.

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## Economies of Excess

John Armitage

This theme issue of **parallax** is devoted to a study of the *economies of excess* – a term derived from the increasingly influential economic writings of the French cultural theorist Georges Bataille (1897–1962). Identified with Nietzschean and Hegelian-inspired examinations of inner experience, ‘heterology’ – the science of what is completely other – eroticism and sovereignty, Bataille is also Foucault, Derrida and Baudrillard’s premier theorist of excess.<sup>1</sup> ‘The Notion of Expenditure’ and *The Accursed Share* announced Bataille’s opposition to classical or ‘restricted’ political economy and elucidated his general economic conception of a world surplus of biological energy that must not be hoarded but squandered.<sup>2</sup> Unearthing a sacrificial *Theory of Religion* and *potlatch* – gift-giving ceremonies in which profitless expenditure is favoured over possession – amongst American Indians, Bataille espoused profitless expenditure as the modern foundation of a revitalized economic relationship between technologically advanced and developing industrial societies.<sup>3</sup>

Timely in its spotlight on the *economies of excess* this issue is an acknowledgement that Bataille’s economic theory now resonates far beyond France. An electrifying appraisal of everything from companionship and knowledge to surplus human consumption, corporeal production and transformation, technology, aesthetics, transnational child adoption, feminist international political economy and speed, *economies of excess* is guided but not confined by the writings of Bataille, Baudrillard, Nietzsche, Virilio and Marx. Unravelling these and other significant cultural theorists of general economy and surplus energy, the issue’s fourteen contributors concentrate on the expanding universe of excess expenditure, an economic realm liberated from all previous constraints and almost all comprehension. Discovering self-sacrificial and near religious cultural ideas and practices embracing individual spending on products and people amidst opulent consumers and impoverished producers, several of the authors collected here advocate profitless expenditure while others interrogate the postmodern premises of the ruinous contemporary political and economic bonds between men and women, East and West.

Responding to the flourishing interest in Bataille’s general economy in the English-speaking world, *economies of excess* includes his previously unpublished article on ‘Friendship’ from the 1940s as well as various other essays such as Plotnitsky’s ‘Bataillian’ investigation of ‘unknowing’, materialism and the general economy of the body. Botting and Wilson’s text on the filmmaker Quentin Tarantino and the

consumption of excess, meanwhile, provides an outstanding encounter with the post-Bataillian economic ideas of Baudrillard. The separate Nietzschean inflected articles of Lingis and Mandoki on corporeal expenditure, materialism and aesthetic transmutation can be regarded as significant essays on general economy, surplus energy, sacrifice and, above all, *pollatch*. Critical analysis is given to Bataille's speculations on technology as well as his engagements with profitless expenditure and possession by Weinstein and Richardson's individual texts. The four non-Bataillian essays on the *economies of excess* are by Bauman, Vasseleu, Sassen and Armitage and Graham. Concentrating on contemporary concerns raised by postmodernists, feminists, Virilio and Marx these texts range across issues relating to consumer relationships, globalization, female child adoption practices in the United States and China, prostitution, illegal human trafficking and 'dromo-economics' or the political economy of speed.

Finally, I must end this editorial by voicing my thanks to Joanne Morra and Marq Smith who commissioned me to edit *economies of excess*, as well as to all the contributors and to the editors of **parallax**. However, there are many more institutions and people to whom I am indebted for their efforts in bringing the project to completion. Gratitude is owed to the financial assistance provided by the University of Northumbria at Newcastle's small grants for research scheme, my colleagues in the Division of Government & Politics and to the research assistance of Arthur Affleck. My appreciation goes to Hager Weslati for providing and translating Bataille's 'Friendship'. Credit is also due to Hager and to Roy Boyne, Neal Curtis, Mark Little, John Lechte, Nicholas Zurbrugg, Rosie Cunningham, John Donnelly, Charlie Blake, Kevin Robins and Mike Gane for refereeing articles. Particular credit is due to Michael Richardson for his crucial interventions regarding Bataille's 'Friendship' and to Marq Smith, Verena Andermatt Conley and Mike Weinstein for their agreement to referee several essays. Lastly, I would like to thank Joanne Roberts for her invaluable and continuing advice on my forays into the *economies of excess*.

#### Notes

<sup>1</sup> Michel Foucault, 'A preface to transgression', in Michel Foucault, *Language, Counter-Memory, Practice: Selected Essays and Interviews*. Edited with an Introduction by Donald F. Bouchard and Sherry Simon (New York: Cornell University Press, 1977), pp.29–52; Jacques Derrida, *Writing and Difference*, Alan Bass (trans.) (Chicago: University of Chicago Press, 1981); Jean Baudrillard, *Symbolic Exchange and Death*, Ian Hamilton Grant (trans.) (London: Sage, 1993).

<sup>2</sup> Georges Bataille, 'The notion of expenditure', Georges Bataille, *Visions of Excess: Selected Writings*,

1927–1939, Allan Stockl, with Carl R. Lovitt and Donald M. Leslie, Jr. (trans.), edited and with an Introduction by Allan Stockl (Minneapolis: University of Minnesota Press, 1985), pp.116–129; Georges Bataille, *The Accursed Share*, vol. 1, Consumption, Robert Hurley (trans.) (New York: Zone Books, 1988 [1949]).

<sup>3</sup> Georges Bataille, *Theory of Religion*, Robert Hurley (trans.) (New York: Zone Books, 1989).

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## Dromoeconomics: Towards a Political Economy of Speed

John Armitage and Phil Graham<sup>1</sup>

And what are we to say of the enthusiasm of post-industrial companies for the cellphone which enables them to abolish the distinction between working hours and private life for their employees?

Or the introduction in Britain not simply of 'part-time' but of 'zero-hour' contracts, accompanied by the provision of a mobile phone. When the company needs you, *it calls and you come running*.

Paul Virilio.<sup>2</sup>

It is *at bottom false to say* that living labour consumes capital; capital ... consumes the living in the production process.

The more production comes to rest on exchange value ... the more important do the physical conditions of exchange – the means of communication and transport – become for the costs of circulation. Capital by its nature drives beyond every spatial barrier. Thus the creation of the physical conditions of exchange – of the means of communication and transport – the annihilation of space by time – becomes an extraordinary necessity for it.

Karl Marx.<sup>3</sup>

In this article we present an alternative theoretical perspective on contemporary cultural, political and economic practices in advanced countries. Like other articles in this issue of **parallax**, our focus is on conceptualising the *economies of excess*. However, our ideas do not draw on the writings of Georges Bataille in *The Accursed Share*, but principally on Virilio's *Speed & Politics: An Essay on Dromology* and Marx's *Capital* and the *Grundrisse*.<sup>4</sup> Using a modest synthesis of tools provided by these theorists, we put forward a tentative conceptualisation of 'dromoeconomics', or, a political economy of speed.

It is important to note at the outset that our general argument concerning excess speed departs considerably from postmodern conceptions of political economy, as well as from traditional Marxist formulations.<sup>5</sup> Instead, our synthesis arises from our individual contributions to the ideas of 'hypermodernism' and 'hypercapitalism'.<sup>6</sup> We argue that the two contradictory forces of warfare and international trade drive the necessity for a conceptualisation of dromoeconomics.

These apparently antithetical but actually interdependent logics identified by Virilio and Marx find their 'suspension' in an institutionalised form of irrational rationality, or what we call 'hypermodern managerialism'; an extended, 'evolved', or 'advanced' form of sociopathic managerialism. It is a rationalist, secular fundamentalism that now extends into almost every aspect of life. In short – and we take this to be self-evident – dromoeconomics has become necessary because warfare has become industrialised while trade has itself become outright war. Both are indistinguishable in their hypermodern managerialist emphasis for the need for a political economy of speed.

We begin by focusing on the work of Virilio and the idea of excess speed before considering its relationship to complementary aspects of Marx's work on the scientific critique of political economy and our conception of dromoeconomics. The second and third sections concentrate on excess speed and overproduction from a hypermodern perspective before centring on human warfare as the basis of international trade and the suspension of these antithetical forces. In the fourth section we focus our efforts on the concept of hypermodern managerialism and the need for speed, the (il)logic of which suspends the antithetical tensions between war and trade. This section shows how hypermodern managerialism is related not only to war but also to trade, excess speed, the annihilation of space by time and the contemporary conditions of human life. In the fifth section, before concluding our argument, we discuss some of the conceptual difficulties inherent in synthesising Virilio and Marx as well as in developing the concept of dromoeconomics.

### Dromoeconomics

For a number of years now, Virilio has been advancing the idea of 'dromology', the study of the logic of speed. Virilio believes that the logic of ever-increasing acceleration lies at the heart of the political and economic organisation and transformation of the contemporary world. As he puts it:

To me, this means that speed and riches are totally linked concepts. And that the history of the world is not only about the political economy of riches, that is, wealth, money, capital, but also about the political economy of speed. If time is money, as they say, then speed is power.<sup>7</sup>

Thus we see that Virilio equates money, power and speed, implicitly recognising that the circulation time of 'ephemeral' capital (money, for example) can, at least theoretically, substitute for 'massive' wealth and the labour it commands.<sup>8</sup> But it is



not enough to say that we have defined excess speed in terms of dromology and that this, in turn, is linked to wealth and power. Rather, we need some way of being able to grasp the relationship between the *political production* of speed and the *economic production* of manifest wealth.

Clearly, in the current 'globalised' environment, speed, mobility and wealth are somehow linked. But how do we connect the circulation time of money with the speed of violence? Virilio answers by calling for the development of a political economy of speed in addition to a political economy of wealth. Indeed, for Virilio, the 'physiocrats who provided the basic studies of political economy' were doing the 'same sort of work' as himself. However, the difference is that his 'research examines the comparable power of speed and its influence on morals, on politics, strategies and so on'. Virilio continues:

I'm a physiocrat of speed and not of wealth. So I'm working in the context of very old traditions and absolutely open situations. At present, we still don't know what a political economy of speed really means. It's research which still awaits subsequent realisation.<sup>9</sup>

Despite apparently confounding the Physiocrats' agrarian political economy with de Tracy's school of 'ideology', Virilio's allusions to a research agenda featuring a political economy of speed provide us with food for thought.<sup>10</sup>

It would of course be possible to develop such a theoretical conception from an explicitly Marxian perspective. Yet we believe that an important aim of this article is to attempt a synthesis of Virilio's ideas on dromology with Marx's rather undeveloped yet scientific and critical conceptions of a political economy of capitalist production, circulation, space and time.

Beginning in earnest in 1867 with the publication of *Capital*, Marx developed his scientific critique of political economy when investigating the development of the industrial revolution. For Marx, the origins of capitalist wealth lie in the production of an economic surplus, an *excess* that is distributed unevenly in the context of international economic growth, thus giving eventual rise to conflicts over ownership, prices, profits, wages and employment conditions on a global scale. 'Let me point out once and for all', Marx writes:

that by classical political economy I mean all the economists who ... have investigated the real internal framework ... of bourgeois relations of production, as opposed to the vulgar economists who only flounder around within the apparent framework of those relations ... systematising in a pedantic way, and proclaiming for everlasting truths, the banal and complacent notions held by the bourgeois agents of production about their own world, which is to them the best possible one.<sup>11</sup>

In Marx's terms, classical political economy gave way to vulgar economics in the first half of the nineteenth century when the bourgeoisie became politically dominant.

Armed with the often-contested authority to subject the growing industrial proletariat to its rule, bourgeois economists abandoned their previous scientific aims and offered the *status quo* as the model for all future developments in political economy. Marx's critique of political economy is therefore a *radical* perspective on the question, definition and central characteristics of classical, conservative and 'neo-classical' economics.<sup>12</sup>

Of course, in the present period, the key question is: how do we synthesise Virilio's call for the development of a political economy of speed with Marx's critique of the political economy of wealth? For us, Virilio and Marx provide the basic starting point for a novel conceptualisation of dromoeconomics, a new political economy of speed. Nonetheless, our inquiry diverges from both Virilio and Marx because it is a synthesis of the related influence of excess speed and its impact on war, on international trade and hypermodern managerialism. For, as Marx suggested:

*Circulation proceeds in space and time ... It is ... an essential process of capital ... The constant continuity of the process, the unobstructed and fluid transition of value from one form into the other, or from one phase of the process into the next, appears as a fundamental condition for production based on capital to a much greater degree than for all earlier forms of production.*<sup>13</sup>

Marx's incisive remarks on circulation, space and time conclude our initial discussion of dromoeconomics. However, it is important to stress that our attempt to synthesise Virilio's ideas on dromology and the political economy of speed with Marx's conception of a critique of political economy is a radical perspective on the conceptualisation of dromoeconomics and the political economy of speed. We now turn to the second section, and to issues of excess speed and overproduction, to the issues of hypermodernism, war and trade.

### Excess Speed and Overproduction: Into the Hypercapitalist World of War and Trade

As noted, the significance of our argument with regard to excess speed and overproduction is that it departs markedly from postmodern notions of political economy. Like postmodern political economists, we are of course centrally concerned with the 'difficult restructuring of corporations in a constantly changing cultural climate' but we disagree with postmodernists such as Sassower that this process 'defies the classical categories of capitalism'.<sup>14</sup> Equally importantly, we distance ourselves from conventional Marxist interpretations such as those of Mandel not because we want to eschew the idea of 'late capitalism' but because we are seeking a less determinist epistemology that is open to a rethinking of Marx's corpus.<sup>15</sup> As a result, our own work rests on the ideas of hypermodernism and hypercapitalism, the latter of which is the most significant in the present context. Broadly, we define hypercapitalism as the system within which the most intimate and fundamental aspects of human social life – forms of thought and language – are formally subsumed under capital and become its most predominant commodities. The two most

distinguishing differences between hypercapitalism and its previous forms is the speed at which processes of circulation and self-valorisation occur, and the ephemeral nature of hypercapitalist commodities associated with its speed-of-light infrastructure of communication technologies.<sup>16</sup> In what follows, then, we suggest that the twin antithetical impulses of war and trade power the compulsion for a contemporary conception of dromoeconomics.

As Virilio and Marx have both argued, all capitalist trade presupposes the overproduction of *something*, an excess of speed or a particular commodity within a community, for instance. It also presupposes a perceived or potential need for something for which a particular person or community lacks the means to produce, and which another person, group, or community produces to excess. All human activity produces *something*. And this something, and the activity that produces it, is the axiomatic basis of excess production. Excess production is a *time-dependent process*. Therefore dromoeconomics becomes an absolute imperative for systemic overproduction. This is because, as Virilio and Marx separately suggest, not only do the 'higher speeds belong to the upper reaches of society' and 'the slower to the bottom' but also, in a very real sense, 'the whole development of wealth rests on the creation of disposable time'.<sup>17</sup> Speed, disposable time, surplus production, and a devotion to abstract wealth constitute one side of the two interdependent and contradictory extremes of the political economy of speed: trade and war.

However, one of the earliest forms of socially institutionalised excess is well evidenced by the works of Virilio and Marx with regard to the wars of antiquity, to the maintenance and, crucially, to the *movement* of standing armies.<sup>18</sup> Considered historically, war is for Virilio a 'method of total control over a territory and of a population'.<sup>19</sup> War is thus a matter of necessity in settled societies. Indeed, according to Marx, throughout the history of human settlement, war has been:

the great comprehensive task, the great communal labour which is required either to occupy the objective conditions of being there alive, or to protect and perpetuate the occupation. Hence the commune consisting of families [is] initially organized in a warlike way – as a system of war and army, and this is one of the conditions of its being there [in a particular place] as proprietor.<sup>20</sup>

To some extent, then, it is possible to speculate that professional warfare – mercenary warfare – is one of the earliest institutions of overproduction. It is therefore feasible to argue that it is the institution upon which all established systems of excess production, agrarian and industrial are founded.<sup>21</sup> For us, therefore, the logics of war and trade are, at their roots, historically inseparable.

It has long been recognised that, while trade is dependent on the overproduction of speed, capitalism is also based on *systemic* economic excess. Indeed, the systematic and conscious production of *massive* excess which, according to Virilio and Marx, is founded firstly on 'the increasing speed of information transmission' and secondly on production 'for export, for the external market'.<sup>22</sup> Thus capitalism, by definition, and at its very foundation, has its historical roots in warfare and *international* trade.

And since excess production implies an emphasis on creating excess time, relatively speaking, economic growth in contemporary capitalism appears to be reliant on the production of faster processes of production. Nowhere in known history has this been achieved more intensively than in the world wars of the twentieth century.

Herein lies a central paradox, which is expressed by the very nature of what is called, rather mystically by postmodern political economists, 'globalisation'. International trade and its imperatives for ever-accelerating productive activities is the organising logic of the 'globalised' society's tempo. That is to say, the social organisation of overproduction demands, whether positively or negatively, ever-more 'efficient' use of fractured, punctuated and rigidly organised social time – seconds, hours, days, months and years – each of which has its socially significant meaning in relation to excess production. However, postmodern globalisation cannot simply refer to the restructuring of corporations, since it apparently requires increasingly massive militaries to maintain its trajectory. This is no less true even if we accept the current reduction of nuclear arsenals by the superpowers and the recent reappearance of tribal, ethnic and religious militias and paramilitaries around the world. For there is a paradox at the heart of these two co-existent systems, war and trade. It is this: whereas globalisation is said by postmodern political economists to be dependent on, and to produce, increasing amounts of inter-national 'harmony' and depends, by definition, on the expansion and integration of national economies, the increasingly complex and expensive system of warfare presupposes increasing amounts of inter- and intra-national conflict.<sup>23</sup> War therefore appears as an antithetical force to that of international trade. But that is not the case. They are complementary systems.

This, then, is what we mean by the hypercapitalist world of war and trade. Today, both systems command, control, solicit, and deploy highly sophisticated information technologies, including, and especially, communication technologies. Both are concerned with control of space and time, and the production and consumption of *people*. Both are ultimately concerned with increased efficiencies of time, acceleration, *increased rates of increasing speed*.<sup>24</sup> Both are intra- and inter-national systems. And, despite their apparently antithetical natures, they are in fact unitary and unifying aspects of the same hypercapitalist system.

Any political economy of speed will, by necessity, be two-sided. As Virilio has suggested, war is 'the art of embellishing death' while Marx has noted the excess production of death and the excess production of the means of destruction.<sup>25</sup> On the other, we have the production of excess time – surplus troops and surplus labour, *surplus people* – and the excess production of the *means of excess production*. Combined with social and religious reasons, these both seemingly rely upon and solicit increases in the velocity of technology, violence and population growth. In trade, acceleration is sought to reduce production, consumption and circulation time; in warfare, to reduce destruction time.

### Suspension

These outwardly contradictory yet truly interlocking developments discovered through focusing on the work of Virilio and Marx attain their suspension in a

gruesome, 'pragmatic', and programmatic synthesis that feeds on the antithetical relationship that unites them. The economics of excess speed and power depend upon surplus time, surplus value and thus surplus labour being available. What, for example, asks Virilio, is to become of the surplus 'people whose lives are being destroyed' by the technological revolution currently bringing about the 'end of salaried work'?<sup>26</sup> Marx answers that such revolutions translate – precisely – into a demand for more people:

what is required for all forms of surplus labour is growth of population;  
of the labouring population for the first form [absolute surplus labour];  
of population generally for the second [relative surplus labour].<sup>27</sup>

Speeding technological development and growing wealth require increases in surplus time; surplus time requires surplus labour: surplus labour means surplus human activity, *surplus human life*. This last is manifest in the explosion of global populations during the last century.<sup>28</sup>

Meanwhile, as Virilio maintains, the fastest growing part of the global economy's 'consumer goods' sector is armaments. Indeed, for him, the recent war in Kosovo not only 'gave fresh impetus' to the military-industrial complex but also to the development of a new 'military-scientific complex'. As Virilio suggests, we 'can see this in China ... [and] in Russia with its development of stealth planes and other very sophisticated military machines'.<sup>29</sup> Or, as Marx puts it, in mechanised, dromoeconomic hypercapitalism, '[i]nvention becomes a business, and the application of science to direct production itself becomes a prospect which determines and solicits it'.<sup>30</sup> Simultaneously, according to the United States (US) Census Bureau, the global population continues to mushroom at the rate of about 80 million people per year.<sup>31</sup> Human life – 'the labour market' – along with its means of destruction remains, quite clearly, the real 'growth' areas at the beginning of the 21<sup>st</sup> century. Each, it seems, provides the rationale and impetus for the other.

### Hypermodern Managerialism: The Need for Speed

We call the programme that actively suspends the central dromoeconomic paradox *hypermodern managerialism*, the irrational 'rationality' of trade and warfare management, both of which have fallen progressively under the same logic since Fredrick W. Taylor's assault on 'industrial soldiering' became *sine qua non* in industrialised nations.<sup>32</sup> Hypermodern managerialism has its secular faith in 'the reality of numbers'. It is a religion presided over by high priests of technical abstraction. Its most vicious phase begins in 1964, with the intensification of managerialist values in the defence department of the US.

That intensification was personified – though not invented – by Robert McNamara – the then US Secretary of Defence and former president of the Ford Motor Company.<sup>33</sup> Armed with the rational, militaristic, 'Management By Objectives' (MBO) system, McNamara mounted an assault on the defence industries' economic inefficiencies.<sup>34</sup> From that point onwards, global warfare came to be seen in the US

as 'a rational business', no different from any other.<sup>35</sup> War and trade once again fell (officially) under the same system of management for the first time since the liberal overthrow of mercantilism.

McNamara decided that from a business perspective the Cold War had been run very inefficiently.<sup>36</sup> To solve this, he 'concluded that it would be rational to limit armament costs by producing larger runs of each weapon and selling the surplus abroad'.<sup>37</sup> This would have a number of desirable effects, improving the balance of trade for the US and making the production of arms much less expensive. It would also ensure 'a unity of material' amongst allies of the US throughout the West should they need to fight a war together.<sup>38</sup> VietNam, the first fully-fledged managerialist war in history, was an abject, destructive and miserable failure. It rang in the era of hypermodern managerialism.

Some insight into the militant, neo-mercantilist logic of our emergent global system can be seen in the attitudes expressed by Friedman:

The hidden hand of the market will never work without a hidden fist – McDonald's cannot flourish without McDonnell Douglas, the builder of the F-15. And the hidden fist that keeps the world safe for Silicon Valley's technologies is called the United States Army, Air Force, Navy and Marine Corps. 'Good ideas and technologies need a strong power that promotes those ideas by example and protects those ideas by winning on the battlefield,' says the foreign policy historian Robert Kagan.<sup>39</sup>

Here the dromoeconomic paradox becomes much more crystalline. As Virilio suggests above, the most excessive, massive and currently profitable sector of 'consumer goods' production is the armaments industry, an industry dependent on what Marx called the annihilation of space by time and, today, paradoxically, by distance.<sup>40</sup> Capital, too, has precisely the same tendencies and dependencies.<sup>41</sup> The productive excesses of capital, which presuppose ever-expanding populations and geographical markets, are led by economies of speed, or more specifically, by an industrialised human culling machine – the military-industrial complex – on the one hand, and by a system of parasitic and abstract speculation – the financial market – on the other.

Even though it is the single largest sector in the 'consumer goods' market, armaments constitutes a minuscule percentage of global trade once we include the currently unsustainable levels of speculation in financial abstractions. In 1995, the global economic trade in physical goods totalled \$US 3.9 trillion *per annum*.<sup>42</sup> Approximately one-third of this was arms sales. In the same year, \$US1.7 trillion *per day* was traded in currency alone, 100 times the amount of actual goods and services traded. In 1999, the currency trade reached \$US6 trillion per day.<sup>43</sup> The 'parasitic' trade in monetary illusions has replaced production of the means of life as the focus for the 'new economy'.<sup>44</sup> As Marx argues above, no longer does circulation in space and time play the rôle of a mere facilitator. Circulation has become an essential process of capital, an end in itself.

The largest corporate mergers and take-overs in history have happened in the last two years. What Virilio calls 'globalitarian' economic power is today centralised to a degree previously unknown in history, with over fifty percent of wealthiest economic entities being corporations, not countries. As Virilio notes:

Now, through the single market, through globalisation, through the convergence of time towards a single time, a world time, a time which comes to dominate local time and the stuff of history, what emerges – through cyberspace, through the big telecommunications conglomerates is a new totalitarianism ... and this is what I call globalitarianism. It is the totalitarianism of all totalities.<sup>45</sup>

Meanwhile, the US multi billion-dollar war machine is presented as the primary producer of global peace. The overall result: the shrill calls for increased efficiencies of 'friction-free' speed by irrational management become ever louder based on claims of success. Billions of dollars are made and lost in seconds in a form of trade which is both illusory and inflationary.<sup>46</sup> More people have been murdered in a violent manner since 1945, when world peace apparently broke out, than in all the wars of the previous 100 years: over 75 million lives, most of these civilian, have been lost in the ongoing series of 'minor incursions'.<sup>47</sup>

Hypermodern trade and hypermodern wars are economies of excess speed, life and death; theirs is the logic of *dromoeconomics*. And all of this is joyously construed as being productive of wealth, or excess *time*. But the over-production of speed is the *negation of time*; it is the *consumption and destruction of time* rather than its emancipation. Conversely, the production of arms is the latent negation of human life, and thus of production itself. The paradox of Schumpeterian 'creative destruction', carried to its illogical extremes, is now juxtaposed to a vulgar Marxian impulse for a revolutionary and 'democratic' global economy. But, as Virilio suggests, the '*speed of light does not merely transform the world. It becomes the world. Globalisation is the speed of light.*'<sup>48</sup> Murder at twice the speed of sound, beyond the horizon of murderers, is juxtaposed to and complemented by the global integration of the telecommunications media through which speed-of-light speculation in financial abstractions forms by far the largest and most 'productive' sector of the global economy. It would seem humanity has reached the apotheosis of an almost universal system of irrational rationality, the logic of hypermodern managerialism.

### Towards a Political Economy of Speed

Although the focus of this article has centred on Virilio's excess speed, Marx's critique of political economy and the concept of dromoeconomics, it is important to note that there remain at least three critical conceptual problems and interpretative questions that require resolution.

The first concerns the political economy of excess speed, or, rather, Virilio's obsessive conceptualisation of it in terms of war and dromology. As Brügger maintains, Virilio's formulation tends towards 'one-dimensionality and totality'.<sup>49</sup> In short, according to

Brügger, in Virilio's world, acceleration explains everything. Consequently, Virilio's analyses tend to overlook other forces at work that he professes to be interested in, namely, the economics of overproduction. Virilio's work is problematic because, although he is deeply concerned with the idea of a political economy of speed, in reality he merely focuses on war and the *political* logic of speed, leaving aside any meaningful explanation of international trade, its *economic* production and suspension. While it would be untrue to suggest that Virilio's analyses focus *only* on speed, it would be true to say that it is virtually impossible to develop a conception of hypermodern managerialism and the need for speed from his chosen stance: there is no method in Virilio's madness. That is why, in this article, we have focused our efforts on providing a Marxian method for a Virilio-inspired hypermodern dromoeconomics.

There are a number of conceptual advantages associated with synthesising Virilio and Marx with the aim of developing the idea of dromoeconomics. But there are also a variety of drawbacks. For some, Marx's political economy veers towards an obsession with production, and what postmodern thinkers like Sassower consider to be his 'essentialist' tendencies, especially in relation to his broad claims to, and belief in, truth, scientificity, and progress.<sup>50</sup> Nevertheless, in this context, the richness of Marx's standpoint on excess production stems from the fact that, unlike Virilio's conception of speed, he does not believe that production literally explains everything. In truth, Marx's writings are, in Kellner's conceptual terms, 'multiperspectival' in scope.<sup>51</sup> They seek to take account not only of political and economic forces, but also of war, speed, the globalisation of capital, the effects and functions of philosophy and metaphysics, and, indeed, of any number of other forces in human society. Marx's 'multiperspectivism' is thus to be welcomed because it is only from such a perspective that a dromoeconomics may actually be developed. Our argument is that a fusion of Virilio's analyses of speed with Marx's critique of political economy is the most fruitful way to develop a dromoeconomics.

The second set of problems concerns the use-value of an approach that centres its analysis on excess speed, overproduction, hypercapitalism, war and trade. Obviously, we believe that there is much to be gained from such an approach. Yet a common criticism of Virilio's writings is that they are not simply overburdened with newly minted neologisms, but that they also arrive unannounced and without any subsequent definition or explanation. However, no such criticisms could be levelled at Marx's works in this regard. Indeed, his conceptual writings are known for their prolonged efforts of clarification and exegesis. Our vantagepoint is therefore founded on the belief that by fusing Virilio's anarchic and conceptual excesses with Marx's theoretical precision, a new kind of hypermodern political economy of speed can be forged.

The recognition of hypermodern political economy also implies the acknowledgement of the significance of suspension, hypermodern managerialism and the need for speed. This leads to our third and most important set of problems and questions. For our study of hypermodern managerialism and militarism is not intended as an 'objective' description of the *status quo*, but as a new and hopefully significant critique of such



developments. Indeed, we maintain that there is something fundamentally at fault in the present system of hypermodern managerialism and globalitarianism founded on the irrational promotion of war in terms of international trade and vice versa. Is there an alternative? We think there is.

First, it is important while developing the idea of dromoeconomics to continue to question orthodox thinking about the rôle of speed in the economy. This is particularly the case with regard to the current mania for fast companies; unrelenting and unreasonable efficiency gains; hypermodern managerialism's concerns with dromological resource allocation and optimisation; as well as the irrational conduct of trade and war at the international level.<sup>32</sup> Second, it is important to focus on a viewpoint that simultaneously encompasses new concerns posed by the globalisation of hypercapitalism, as well as those addressed by the traditions of classical political economy. Specifically, 'dromoeconomists' need not deny the orthodox insistence on the significance of international trade. However, we argue that such a focus is too one-dimensional to grasp the reality of contemporary global conditions. It is for this reason that we have decided to centre our conceptualisation on the neglected dimension of the political economy of speed. For what is required, above all, is recognition of the centrality of speed in contemporary societies. But such an acknowledgement must also be joined by the recognition that a focus on speed alone will not, in and of itself, suffice. It is imperative, therefore, to link the issue of speed to relationships of power, of exploitation, of coercion, of hierarchy, and to the accelerating characteristics of the work and market places in global capitalism.

## Conclusion

Our tentative dromoeconomics is, to some degree, an acknowledgement that contemporary capitalist societies are 'dromocratic' societies, societies constantly on the move and governed according to dominant perceptions about the political and economic logic that their trade and war technologies demand. They are societies that are truly dynamic. However, they are ones that remain not only in dangerous disequilibria, but also – apparently – in delirious ignorance of the damage being wrought by their own systemic and turbulent logics. Moving towards a genuine understanding of dromoeconomics in contemporary society therefore entails a conception of the political economy of speed.

But it also entails the recognition that Virilio's emphasis on excess speed and Marx's analysis of overproduction present us with opportunities for thinking about hypermodern explanations of war and trade that differ significantly from those offered by either postmodern or traditional Marxian political economists.

Our preliminary agenda for a political economy of speed centred on suspension is merely one aspect of dromoeconomics. It is by no means definitive or exhaustive. We simply hope to point towards what we think is an important and undertheorised aspect; hypermodern managerialism and the need for speed, and the expression of these in the logics of war and trade. Our emphasis on hypermodern managerialism is necessary because armed conflict is a constituent feature of industrialisation and

international trade. Globalitarian economic power, hypermodern trade and hypermodern war are the foundations of the globalisation of dromoeconomics. Moving towards an understanding of dromoeconomics, despite its conceptual difficulties, is therefore no longer an option. It is a necessity. In conclusion, we believe that our conception of dromoeconomics is significant not because it is yet another neologism but because of the important question it raises, the question of the political economy of speed.

#### Notes

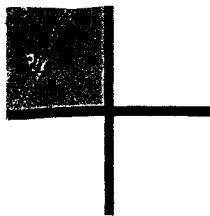
- <sup>1</sup> Thanks to Greg Hearn, Douglas Kellner and Bernard McKenna for their valuable comments on earlier drafts.
- <sup>2</sup> Paul Virilio, *The Information Bomb* (London: Verso, 2000), pp.67. Original emphasis.
- <sup>3</sup> Karl Marx, *Grundrisse: Foundations of the Critique of Political Economy* (London: Penguin, 1973), p.349 and p.524. Original emphasis.
- <sup>4</sup> George Bataille, *The Accursed Share*, vol 1, Consumption, R. Hurley (trans.) (New York: Zone Books, 1988 [1949]); Paul Virilio, *Speed & Politics: An Essay on Dromology*, M. Polizzotti (trans.) (New York: Semiotext (e), 1986 [1977]); Karl Marx, *Capital*, vol 1, B. Fowkes (trans.) (London: Penguin, 1976 [1867]); and Marx, 1973.
- <sup>5</sup> See, for instance, R. Sassower 'Postmodern Political Economy', in his *Cultural Collisions: Postmodern Technoscience* (London: Routledge, 1995), pp.113–123; and E. Mandel, *Late Capitalism*, J. de Bres (trans.) (London: New Left Books, 1975).
- <sup>6</sup> John Armitage (ed.), *Paul Virilio: From Modernism to Hypermodernism and Beyond* (London: Sage, 2000); P. Graham, 'Hypercapitalism: A Political Economy of Informational Idealism', *New Media and Society*, 2 (2), (2000a), pp.131–156.
- <sup>7</sup> Armitage, 2000, p.35.
- <sup>8</sup> Marx, 1973, p.518.
- <sup>9</sup> Armitage, 2000, p.5.
- <sup>10</sup> See, for example, E. Kennedy, "'Ideology'" from Destutt de Tracy to Marx', *Journal of the History of Ideas*, 40, (3) (1979), pp.353–368.
- <sup>11</sup> Marx, 1976, pp.174–5.
- <sup>12</sup> On the complex question of determining the nature of political economy see, for example, V. Mosco, 'What is Political Economy?', in his *The Political Economy of Communication* (London: Sage, 1996), pp.22–69.
- <sup>13</sup> Marx, 1973, pp.533–535.
- <sup>14</sup> Sassower, 1995, p.113.
- <sup>15</sup> Mandel, 1975. On recent efforts to rethink Marx see, for instance, G. McLennan, 'Re-Canonizing Marx', *Cultural Studies* 13 (4), 1999, pp.555–576.
- <sup>16</sup> Graham, 2000a.
- <sup>17</sup> Armitage, 2000, p.35; and Marx, 1973, p.398.
- <sup>18</sup> Armitage, 2000, p.36; and Marx, 1973, p.468.
- <sup>19</sup> Armitage, 2000, p.45.
- <sup>20</sup> Marx, 1973, p.474.
- <sup>21</sup> Marx, 1973, p.491.
- <sup>22</sup> Armitage, 2000, p.36; and Marx, 1973, p.511.
- <sup>23</sup> Organisation for Economic Co-operation and Development (OECD), '21st Century economic dynamics: anatomy of a long boom: Key points of the discussion', Expo 2000 OECD forum for the future, conference 2, Paris, OECD (1999).
- <sup>24</sup> Phil Graham, 'Time, space, new media, and political economy: a history of hype and hypercapitalism' (Manuscript under review, 2000b).
- <sup>25</sup> John Armitage, 'The Kosovo W@r Did Take Place: An Interview with Paul Virilio' in J. Armitage (ed.), *Virilio Live: Selected Interviews* (London: Sage, 2001), forthcoming; and Marx, 1976, p.751.
- <sup>26</sup> Armitage, 2000, p.37.
- <sup>27</sup> Marx, 1973, p.771.
- <sup>28</sup> At the turn of the twentieth century, best available estimates put global population at 1.5–1.7 billion. At the year 2000, the mid-year global population is estimated to be 6,073,104,685: United States (US) Census Bureau *Historical Estimates of World Population* (2000a): <http://www.census.gov/ipc/www/worldhis.html>; US Census Bureau *Total Midyear Population for the World: 1950–2050* (2000b): <http://www.census.gov/ipc/www/worldpop.html>. Both Washington, Department of Commerce.
- <sup>29</sup> Armitage, 2001, forthcoming. Original emphasis.
- <sup>30</sup> Marx, 1973, p.704.
- <sup>31</sup> US Census Bureau, 2000b.
- <sup>32</sup> T. Dixon, *Communication, Organization, and Performance* (New Jersey: Ablex, 1996).
- <sup>33</sup> J. R. Saul, *Voltaire's Bastards* (Ontario: Penguin, 1992), pp.81–89.
- <sup>34</sup> Dixon, 1996. See, in particular, Chapter 3; and Saul, 1992, pp.81–90.
- <sup>35</sup> On the genesis of managerial warfare, see Mandel, 1975, p.301 and Saul, 1992, pp.81–90.
- <sup>36</sup> Saul, 1992, pp.81–83.

- <sup>37</sup> Saul, 1992, p.82.
- <sup>38</sup> Saul, 1992, p.82.
- <sup>39</sup> T. L. Friedman, 'A manifesto for the fast world'. *New York Times Magazine*, (1999, March 28), pp.40–44, p.61, pp.70–71, p.84 and p.96.
- <sup>40</sup> Armitage, 2000, pp.1–23.
- <sup>41</sup> Graham, 2000b, forthcoming; and Marx, 1973, p.524.
- <sup>42</sup> J. R. Saul, *The Unconscious Civilization* (Maryborough: Penguin, 1997), p.21.
- <sup>43</sup> J. R. Saul, 'Democracy and Globalisation'. Address to the Evatt Foundation, Sydney, Australia, 2000. URL consulted March 1, 2000: <http://www.abc.net.au/specials/saul/fulltext.html>.
- <sup>44</sup> P. Kennedy, 'Coming to Terms with Contemporary Capitalism: Beyond the Idealism of Globalisation and Capitalist Ascendancy Arguments', *Sociological Research Online*, 3 (2) (1998), online journal). <http://www.socioresonline.org.uk/socioresonline/3/2/6.html>.
- <sup>45</sup> Armitage, 2000, p.38.
- <sup>46</sup> Graham, 2000b, forthcoming.
- <sup>47</sup> Saul, 1997, p.12.
- <sup>48</sup> Armitage, 2001, forthcoming.
- <sup>49</sup> N. Brügger, 'Connecting themes in the Work of Paul Virilio – A Critical Introduction', Conference Paper prepared for the 3<sup>rd</sup> *International Crossroads in Cultural Studies Conference*, 21–25 June 2000, Birmingham, UK, pp.8.
- <sup>50</sup> Sassower, 1995, pp.113–123.
- <sup>51</sup> D. Kellner, *Media Culture: Cultural Studies, Identity and Politics Between the Modern and the Postmodern* (London: Routledge, 1995).
- <sup>52</sup> On the role of speed in contemporary capitalist business see, for example, Nigel Thrift's recent paper on 'fast companies' entitled 'Animal Spirits: Performing Cultures in the New Economy' prepared for the 8<sup>th</sup> (Millennium) *Conference of the International Joseph A. Schumpeter Society*, 28 June–1st July 2000, University of Manchester, UK.

**John Armitage** is Principal Lecturer in politics and media studies at the University of Northumbria, Newcastle upon Tyne, UK. Currently editing *Virilio Live: Selected Interviews* for Sage Publications, he is also working on *Living With Cyberspace: Technology & Society in the 21st Century* for The Athlone Press with Joanne Roberts.

**Philip Graham** is a Lecturer in Communication at the University of Queensland Department of Management. He has worked extensively on policy analysis and is writing for a number of forthcoming books and articles about political economy, language and new media.

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## Project(ile)s of Hypermodern(organ)ization<sup>1</sup>

John Armitage

University of Northumbria, UK

### abstract

This article on the ephemeralization of organizations and institutions considers the meaning of ephemeral environments and, from a speculative critical and 'hypermodern' theoretical perspective, argues that we are currently witnessing the obliteration of the time-space of the private and the public, the peaceful and warlike, through the introduction of the concept of 'hypermodern(organ)ization'. It suggests that the 'project(ile)s' of hypermodern(organ)ization, namely, 'hypercapitalism', 'globalitarianism' and 'militarization', are key components of an emergent 'hypermodernity'. Focusing on hypercapitalism, the article proposes that 'dromoeconomics' and the 'economies of excess', 'ephemeral commodities', digital technologies and 'chronopolitics' in the 'hypermodern city' can only be understood within the context of 'total mobilization'. Additionally, it argues that Virilio's hypermodern conceptions of globalitarianism, together with the terminology of 'molar' and 'molecular' project(ile)s, 'polar inertia' and the critique of the military origins of industrialization and the events of the Kosovo war should be prominent in any contemporary socio-cultural theoretical interpretation, rather than postmodern conceptions of so-called globalization and the crisis of the nation state. Considering 'Pentagon Capitalism' and universal 'human rights' through a critical engagement with Virilio, Chomsky and Bauman, the article suggests that Lingis' philosophical writings on 'phallocentrism' and those of the 'anarchitect' Woods on 'everyday war' in the hypermodern city are especially relevant to such concerns. It concludes that the project(ile)s of hypermodern(organ)ization can usefully be reconsidered within Lingis' framework of the 'institution of the dimension of verticality' and Virilio's cultural globalitarianism or 'the face of hypermodern(organ)ization man'.

Bombs are to be placed somewhere – but, first of all, at the roots of most of our contemporary modes of thought. (Antonin Artaud, from the 'Manifesto' of November 13, 1926)

### Introducing Hypermodern(organ)ization

We live today in an increasingly ephemeral environment. Critical dialogues on the ephemeralization of business corporations, public organizations and military institutions envelop us, from discussions of the activities of the Internet giant Microsoft to the

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digitalisation of the advanced democracies or NATO's recent prosecution of 'cyberwar' in Kosovo and beyond. What does the development of ephemeral environments mean for our everyday social and cultural life? From the suppositional explanatory standpoint of 'hypermodern' cultural and social theory founded on the appreciation of the *excesses* of modernism and modernity, in this article I want to comment upon a number of developments associated with what I call 'hypermodernism' (eg., Armitage, 2000a: 18-19) and 'hypermodernity'. However, since it is the latter term that features most prominently below, I shall only define hypermodernity here. Hypermodernity refers to any contemporary social process containing a greater than usual amount of various elements relating to the quality or state of modernity (eg., excessive speed). Indeed, I want to argue in this article that the process of ephemeralization presages profound changes. Broadly, I suggest that we are currently witnessing the effacement of the differentiation between the time-space of the private and the public, peace and war. Nevertheless, before we proceed any further, it is important to introduce a number of key concepts, most importantly the concept of the time-space of hypermodern(organ)ization.

I want to introduce the concept of hypermodern(organ)ization with a view to describing a collection of *excessive* social phenomena that are not usually described together. However, Augé's (1995) *Non-Places: Introduction to an Anthropology of Supermodernity* is similar in inspiration if different in its objectives. Certainly, the term hypermodern(organ)ization is missing from today's analytical debates over organizational and institutional change that is the central focus of this article. Even so, as numerous authors utilise the concepts of 'modernization' and 'organization' in their writings, I shall accordingly firstly elucidate these sometimes-difficult ideas.

Employing the concepts of modernization and organization as the basis for an analysis of hypermodern(organ)ization would be straightforward if these terms had not been routinely applied in order to delineate a host of partisan, contentious and frequently irreconcilable processes that characterise the present period. For the central difficulty with these ideas is that, almost from the outset, the modern method of wielding them has been predisposed towards a 'meta-narrative' of 'progress' (Lyotard, 1984). This approach has led to a fixed way of observing varieties of business corporations, public organizations and military institutions as influenced more or less exclusively by 'development economics' and the 'rational' disposal of political and social power. Moreover, the current debates over 'post-industrial business', 'neo-disciplinary organizational studies', war and the 'new politics of conflict', with their stress on the shift from modern to 'postmodern' organizations, institutions and practices are more typical descendants of the debate over modernization and organization than is my interpretation of hypermodern(organ)ization (see, eg., Kelly, 1999; 'Editorial', 1994; and Gray, 1997).

Within the positivist social sciences, the prevalent approach to modernization and organization remains within the realm of modernity. To be sure, contemporary evaluations using these terms are for the most part focused upon the processes of business, organizations and military institutions. Yet, in this article, I want to use the ideas of modernization and organization creatively, that is, within the terms of the time-space of hypermodern(organ)ization. It is therefore helpful to begin by partly divesting

modernization of its business and corporate associations and organization of its preoccupation with, for example, the specification of institutional aims, goals and the composition, function and place of individual roles and occupations. This is because, for me, the central theme and important aim of this article is to trace the time-space continuum of organizational and institutional change through an analysis of the 'project(ile)s' of hypermodern(organ)ization.

By project(ile), I mean, first, a *project*; that is, a set of proposals or tasks requiring concerted effort, such as proposals relating to the possibilities of production or the tasks of co-ordination and strategy undertaken by the individual functionaries of business corporations, organizations and military institutions. Second, a project is also a *projection* or a prediction of future needs based on current knowledge and the assumption that it will be 'thrown' forwards to become a real manifestation in the time-space of the future and/or an imagined vision of it. Such temporal and spatial projections (eg., about 'the future of the Internet' or 'the coming of cyberwar') continually restructure the objective physical and spatial environment as well as arouse the subjective mentality and desires of individual functionaries presently predicting the future needs of organizations and institutions. Furthermore, projections are increasingly reliant on corporate, organizational and militarized knowledge being hurled forth into the future through the use of Information and Communication Technologies (ICTs) such as the Internet. A *project(ile)* can therefore be defined as any project or projection that entails physical objects and environments or human subjects being thrown forwards in the manner of a self-propelling rocket, especially one that is powered by or fired from business corporations, organizations and military institutions. The time-space continuum of organizational and institutional change is thus a time-space powered by the project(ile)s of hypermodern(organ)ization. But it is also one where modern capitalism and globalization morph into a 'hypercapitalism' (Graham, 2000) of excessive speed founded on ephemeralized commodities provided by the Internet and 'globalitarianism', Virilio's critique of the development of a totalitarian 'world time' (Armitage, 2000b: 37-38). What the development of ephemeral environments appears to mean for our everyday social and cultural lives in the context of a dematerialising hypermodernity, then, is an increasing immersion in the militarized electronic landscape of the Internet and the militarization of all human social and cultural values.

Clearly, the transdisciplinary project(ile)s of hypermodernity cannot easily be incorporated into the traditional models of the political economy of corporations, organizations and the military. Ordinarily, of course, it is the explicit rules governing corporate, economic and institutional relations between roles that are of paramount interest to most political economists. In this article, therefore, I am not primarily concerned with traditional political economy but, rather, with theoretical and critical as well as social and cultural discussion, discovery and analysis. The prelude to this sort of approach must be the theoretical examination of corporations, organizations, military and institutional or bureaucratic determinants in their broadest sense, along with additional pertinent social and cultural determinants. Those that are of interest to the hypermodern theorist are characterised by, for instance, hypercapitalism and 'dromoeconomics' or the political economy of speed (Armitage and Graham, 2001), the hypermodern 'economies of excess' (Armitage, 2001a) production and consumption and, in particular, the 'ephemeral commodities' of digitised information and

communication. Such determinants are of course characteristic of the age of what Virilio (eg., 1999) calls 'chrono' or speed politics as life in the 'hypermodern city' of all encompassing social project(ile)s and the accelerated mentality of the movement of people gears up for what I label 'total mobilization' (Armitage, 2001b).

This method of procedure is therefore representative of my present-day inquiries into hypermodern(organ)ization as well as hypermodernity, if not into modernization and organization. In this article, I shall use Virilio's *The Information Bomb* (2000a), as a guidebook for an exploration of the transition from modernity to hypermodernity. My own conception of hypermodern theory is thus one of a philosophical theory founded on a synthesis of phenomenology and contemporary poststructuralist, postmodern and other cultural and political studies. It is within this theoretical framework, then, that I situate this article on the excessive social project(ile) that is hypermodern(organ)ization.

This theoretical framework and definition is important for my interpretation because I want to suggest that the current hypermodern and globalitarian project(ile)s of hypermodern(organ)ization are not merely technological but social and cultural in character. Simultaneously, such globalitarian project(ile)s are also caught up in the often-contradictory development of 'molar-project(ile)s' such as globalitarianism in which particular events and processes are terminated and 'molecular-project(ile)s' that allow for their initiation into the time-space of terminal velocities. Virilio (Armitage, 2000b: 11), for example, refers to these project(ile)s in terms of a 'polar inertia' or 'the situation in which every city [and every person] will be in the same place – in time'. In my exposition, therefore, the logic of globalitarianism is predicated on the military origins of industrialization and international trade rivalry (Sen, 1995). This is what Virilio (2000b: 43), writing from within the circumstances of the war in Kosovo in 1999, calls 'Pentagon Capitalism', the ensnaring of one's economic rivals in unproductive military expenditure. Yet, I argue that it is important to exercise caution not only when confronted with those states promoting militarized 'human rights' but also when reading those writers like Virilio, Bauman (2001a) and Chomsky (2000) urging a critique of militarized human rights. For such critiques seem unaware of what Lingis (1984: 67-68) calls 'phallogocentric culture' and the 'institution of the dimension of verticality' regarding cultural values. Consequently, and adopting a rather different interpretation of globalitarianism to Virilio, I turn to the 'anarchitect' Woods' (2000) conception of 'everyday war' and warring identities for an explanation of what I call the 'de(con)struction' of the hypermodern city.

This concludes my compressed conceptual account and the introduction of the essential themes of my attempt to further an understanding of hypermodern(organ)ization. In the next section, I will pay attention to the core features of the project(ile)s of hypermodern(organ)ization and their importance and, in the following section, focus on the project(ile) of hypercapitalism. Globalitarianism and militarization are the concerns of the last substantial section, and, as noted, these concepts are crucial to my interpretation and particular contribution to the apprehension of the project(ile)s of hypermodern(organ)ization. The final parts of this section contain a critical assessment of Chomsky and Virilio's work on globalitarianism while Lingis' and my own evaluation of the project(ile)s of hypermodern(organ)ization are contained in the conclusion.



## Project(ile)s of Hypermodern(organ)ization

I want to suggest that although the project(ile)s of modernization and organization characterised modernity, the accelerated and intensified project(ile)s of hypermodern(organ)ization characterise hypermodernity. From this perspective, contemporary business corporations, organizations and military institutions are viewed as hypermodern(organ)izations rather than as modern on the grounds that significant transformations have taken place during the past quarter century, even though the increasing levels of acceleration and intensification belie a certain degree of continuity between modern and hypermodern(organ)izations. But what are the important transformations and how might we describe and analyse the transition from modernity to hypermodernity?

As I have indicated, I identify such transformations and transitional arrangements with a move from modern capitalism to hypercapitalism. However, the project(ile)s of hypermodern(organ)ization encompassing the dromoeconomics of ephemeral commodities and the economies of excess also include 'shopping disorders' (Lieberman, 1993) and exorbitant consumption (Bauman, 2001b), uncertainty (Armitage, 2000c) and chronopolitics as well as a consideration of the hypermodern city. Further, a second set of identifying markers concerning the present transition not only include globalitarianism and militarization but also the 'information bomb' and the 'integral accident' (Virilio, 2000b) and the critical interrogation of the intensification of ultra-modern political and economic, cultural and military values.

It is not my aim to try to synthesise all of the concepts listed above into one coherent theoretical structure. I merely wish to indicate the emerging and significant literature and debate over hypermodernity arriving at this terminological transit lounge from different points of departure and often heading for different destinations. Nor do I wish to attempt to construct what might be thought of as a generally agreed schema or give a convoluted account of the various positions adopted in this developing debate since it is far too early to do so.

What I do want to do is to convey my own perspective on hypermodernity, a perspective that is neither scientifically empiricist nor metaphysically idealist. Merleau-Ponty's (1962) efforts to overcome the distinction between extreme objectivism and extreme subjectivism, with their conception of consciousness as immutably corporeal in the world, examined in his *Phenomenology of Perception*, are productive and suggestive in terms of the fact that phenomenology finds its real vocation in a philosophy of *ambiguity*. In other words, my conception of hypermodernity is concerned with an approach to the project(ile)s of hypermodern(organ)ization that is self-consciously ambiguous. Hypermodernity therefore lies in the realm of the 'in-between', a transient realm that perhaps pre-exists the division into objects and subjects and which can only be articulated and weighed in the balance in the particular historical conditions that we are currently living through. Thus, any evaluation made of phenomenology and terms such as hypermodernity must from the beginning take into account phenomenology's intrinsic taste for and commitment to ambiguity. The question is what particular historical conditions are we currently living through?

Bauman (2000: 113-114; emphases in original) argues that the “part of history” that is “now coming to its close” is “the era of *hardware*, or *heavy* modernity”. For Bauman, heavy modernity was an era obsessed with ‘bulk’ and centred on ideas founded on a discourse conceived in terms of large is best, ‘size is power’ and that ‘volume is success’. Bauman’s description of the demise of ‘heavy modernity’ and the rise of ‘liquid modernity’ are obviously in keeping with a critical and hypermodernist disposition. Nevertheless, this is neither the time nor the place to advance into the contemporary debate over Bauman’s characterisation of modernity or postmodernity (see, eg. Smith, 1999). Rather, and in keeping with a phenomenological methodological stance befitting an archaeologist of the future, I shall underline several related features that I consider to be significant signs of an emergent and near terminal hypermodernity.

My hypermodern analysis is centred on the ‘uncertainty principle’ (Armitage, 2000c) that connects ‘dromology’ (Virilio, 1986) or the logic of speed to the intensification and complex networking of contemporary organizations and institutions with the aim of identifying and comprehending what I see as the three most important project(ile)s of hypermodern(organ)ization.

First, and according to the uncertainty principle, hypermodernity is not governed by the business rationale of modern capitalism that ruled modernity but by hypercapitalism. Moreover, the increasing levels of uncertainty relate to the principles of present-day business corporations and organizations in the context of the appearance of dromoeconomics and the ephemeralization of commodities.

Second, military, informational and globalitarian project(ile)s are progressively moulding the development of hypermodernity around the world and, as a result, are exposing whole populations to the dangers of the information bomb – the ‘explosive’ transmission of information and interactivity from one nodal point of the planet to another. Such explosions are of course the scenes of Virilio’s (2000a: 134; original emphases) integral accident, an accident that is “no longer *local* and precisely situated, but *global* and generalized”. The scene of the integral accident can thus be witnessed in a variety of temporal and spatial sites ranging from the “collapse of the [New York] stock exchange” in 1987 to NATO’s war in Kosovo in 1999 (Armitage, 2000b: 41; Chossudovsky, 2001).

Third, we are all increasingly subject to the demands of military dominated configurations. Much of our temporal and spatial existence is now militarized rather than civilianized. It is by way of militarized ICTs such as the Internet, for instance, that we are becoming conscious of the juxtaposition and eradication of the temporal and spatial distinctions between the private and the public, the peaceful and the warlike. With the near-compulsory imposition of militarized technologies, including that ubiquitous ‘Walkie Talkie’, the cellphone, it is practically impossible to escape from ‘decontextualized’ business and corporate, organizational or militarized cultural values and contacts with others whether we are at home or abroad, at peace or at war (Richardson, 2001). Even our phallogentric and vertical bodies are now part of the militarized business and corporate sphere (Virilio, 2000c).

The hypermodern configurations and project(ile)s that prepare contemporary businesses, organizations and institutions for hypermodern(organ)ization are thus hypercapitalism, uncertainty, globalitarianism and the relentless militarization of everyday life. In short, hypermodernity is principally characterised by the acceleration and intensification of modernity, inclusive of the levelling and what I call the 'de(con)struction' of the distinction between the private and peaceful, public and warlike realms. What we are presently living through, then, is not merely what Deleuze and Guattari (Goodchild, 1996: 218-219) call 'deterritorialization' (leaving home and travelling in foreign parts) and 'reterritorialization' (making a new dwelling place) but the total mobilization and militarization of the economic, social, political and cultural field. Consequently, instead of conceptions of modernization, organization or heavy modernity, I prefer the terms hypermodernity and hypermodern(organ)ization because it is hypermodernity and hypermodern(organ)ization, together with the three project(ile)s of hypercapitalism, globalitarianism and militarization, that are 'de(con)structing' all important temporal and spatial distinctions. I discuss hypercapitalism and globalitarianism in detail in the following sections of this article. Current questions of militarization, while addressed at relevant points of the overall argument are not given a separate section for reasons of space. However, I have developed the idea of militarization in a related article (Armitage, 2001c). In the next section, then, I want to pay attention to the project(ile) and significance of hypercapitalism.

## Hypercapitalism

A critical facet of the contemporary shift from modernity to hypermodernity is that business corporations and organizations are transforming themselves into 'fast companies' (Thrift, 2000) and 'network enterprises' (Castells, 2000) in the context of seemingly permanent restructuring. However, what is new in hypermodernity is that as the rate of speed accelerates it results in increasing levels of unpredictability and the rise of dromoeconomics along with the appearance of ephemeralized commodities and the economies of excess. Moreover, and precisely because they are fast companies and network enterprises restructuring themselves at speed, it becomes harder for these organizations to calculate their forthcoming production and data requirements, a phenomenon that 'throws' hypermodern(organ)izations forwards into a realm that is part fact, part fantasy and wholly uncertain.

Phil Graham and I have suggested that dromoeconomics is the latest historical manifestation of a successive number of forms of capitalism. In the nineteenth and twentieth centuries, for example, first 'proto' and second 'modern' capitalism functioned respectively on the geographical scales of the local and the national while in the twenty first century – the century of hypermodernity – hypercapitalism functions on the global scale. In our account, the "two most distinguishing differences between hypercapitalism and its previous forms is the speed at which processes of circulation and self-valorisation occur, and the ephemeral nature of hypercapitalist commodities associated with its speed-of-light infrastructure of communication technologies" (Armitage and Graham, 2001: 114-115). Given the rise of hypercapitalism and dromoeconomics at the global scale, how might we characterise the role of speed and

the ephemeral nature of hypercapitalist commodities in the context of the development and spread of ICTs and the emergence of the economies of excess?

As Smith (1985) has demonstrated, the production project(ile) underpinning proto and modern capitalism was the militarized production of *weaponry*. It was therefore weapons production that laid the foundations for the large scale manufacture of ever cheaper commodities for the consumption needs of national groups or what, after Lieberman's (1993) 'disorderly shoppers', might be termed 'orderly shoppers'. Thus, first weapons in the early nineteenth century through what Smith labels the 'American system of Manufacturing' and second commodities in the early twentieth century through 'Fordism' were homogenised while their organization was streamlined and assembly-line production introduced for the manufacture of commodities and increasingly today, consumer services.

Nevertheless, as today's project(ile)s of hypermodern(organ)ization illustrate, disorderly shoppers reject even the *idea* of a limited variety of commodities and insist on making choices in *excess* of earlier norms and at an increasing speed. Consequently, an ever changing and ceaselessly 'exciting' product range must be delivered to disorderly shoppers in the market place of excess. As Lieberman argues, the accelerated "disordered shopper acts in the interest neither of utility nor of pleasure. The phenomenal experience of its body is always one of discontent, chronic unrest and stimulation" (1993: 246).

In addition, dromoeconomic production is no longer centred on modern capitalist commodities but on ephemeralized hypercapitalist commodities. In brief, hypercapitalist production and consumption is increasingly focused on commodities incorporating essentially circulating, sometimes self-referential and at all times fleeting, digital and easily reproducible images where material ocular persistence 'disappears' into the cognitive sphere (Virilio, 1991). Further, the economic and social value of ephemeral commodities can only become progressively uncertain as fast companies and network enterprises, the architects of digital production on the Internet, provide their clients, disorderly shoppers all, with an economy of excess. Based on the values of corporate advertizing speak and on an overabundance of social communication, disorderly Internet shoppers are seduced by the myriad possibilities and permutations for ephemeral consumption and evaluation. Of course, as Richardson argues, such 'empty babbling' includes "no restraining constituent able to provide a context that any medium of genuine communication needs in the long run" (2001: 82). The ephemeralized commodity is accordingly a commodity that has reached what Baudrillard calls the 'fractal' stage of value where "there is no point of reference at all, and value radiates in all directions ... by virtue of pure contiguity" (1993: 5).

Also, as the project(ile)s of deterritorialization, reterritorialization and the militarized logistics underpinning dromoeconomics accelerates, the contemporary strategy of deterritorialization becomes evident to all as it discards the constraints of modern capitalism and triggers the new project(ile)s of hypercapitalism, inclusive of the need to project business corporations and organizations into the fast lane of the networked enterprise. Hypercapitalism thus compels its functionaries to operate in a decision-making environment characterised by 'social overload' (Jeudy, 1994), endless

circulation, self-valorisation and the increasing ambiguity, if not the complete absence, of consumption norms under conditions of hypercapitalist commodity production conducted at the speed of light (see, eg., Fleming, 1998).

What, then, distinguishes the current hypermodern project(ile) of reterritorialization in the speeding network enterprise from the modern business corporation or organization? It is the realization that while production, knowledge and authority became increasingly deterritorialized through the temporal and spatial separation of the private, emotional and political life and responsibilities of the family from the public realm of production, knowledge and the state in modernity, in hypermodernity the project(ile) of reterritorialization is accelerating and intensifying the necessity of making new dwelling places.

The militarized logic beneath dromoeconomics, for instance, not only reveals that hypercapitalist disorderly shoppers consume at differential yet increasing speeds but also that they cannot be analysed as if they were all part of a single project(ile) of circulation and self-valorisation. Indeed, through the search, purchase and use of various ephemeralized hypercapitalist commodities, and by means of the Internet in particular, people increasingly articulate themselves in the manner of those inhabiting what Agamben (1999) terms the 'gray zone'. The gray zone is a kind of reterritorialized non-place where disorderly shoppers, perhaps 'surfing' silently through cyberspace with the mentality of the dead, are detached from the social world beyond the computer screen. Starved of genuine communication, such shoppers are often obsessed not with the search for ephemeral commodities as such but with the quest for the means of processing ever more quantities of 'information'. There is, therefore, an accelerating and intensifying 'rhythm of reterritorialization' associated with that new dwelling place, the gray zone of the Internet. The pursuit of a novel place to live is of course linked to the invention and pursuit of human 'happiness'. As Bauman (2001b: 88-90) argues, today, this pursuit is "shaped in the likeness of a road-movie", and, like a road-movie, is little more than a "picaresque string of adventures" that discard their allure the minute they have "been tried and tasted". Thus, if in modernity it was conceivable to differentiate between "the irritating length of delay" and the "dreamed of bliss a long distance away", in hypermodernity it is impossible to distinguish between "the non-dimensionality of moments" where "reward comes instantaneously". A related argument to Bauman's is advanced by Robins (1999) but with regard to the spatial dissatisfactions voiced by the advocates of 'virtual communities' and their consequent desire for the overcoming of the 'burden' of physical geography.

However, and while the increasing rhythm of hypermodern reterritorialization does indeed involve the end of a certain kind of geography, a project(ile) that Virilio (1999: 18) calls a movement from "geopolitics to chronopolitics", it also implies that the typical spaces of modernity, such as the modern city, are once and for all losing what Sennett (2001: 1), following Levinas, labels the "neighbourliness of strangers". This, together with the emergence of chronopolitics, can be witnessed in the dromoeconomic relationships between globalised hypercapitalism and the appearance of what Sennett speaks of as 'skin architecture' and the 'standardisation of the environment'. For it is in the context of present day speed capitalism and the accelerating processes of circulation that any semblance of family life or civic public space is being destroyed.

Chronopolitics is also visible in relation to those new movers and shakers of hypermodernity in the hypermodern city, the 'global kinetic elite' (Armitage, 2000d). Operating out of the top floors of skyscrapers in hypercapitalist New York, London and Tokyo, the global kinetic elite is the chief purveyor of the ephemeral commodities conjured up on its computer screens and launched into circulation over the Internet and over the heads of the strangers below. Although chronopolitics is obviously predicated on the avoidance of strangers, it is also crucially founded on the avoidance of the urban political realm altogether and any responsibility for the consequences wrought by fast companies and networked organizations on family relationships or public citizenship. Public servants in hypermodern cities, for example, "can't tap into the wealth of these corporations" and the corporations themselves "take little responsibility for their own presence in the city" (Sennett, 2001: 4). It is thus ephemeralization or what Sennett (2001: 4) describes as the "threat of absence, of leaving" that allows for the "the avoidance of responsibility". In short, for Sennett (2001: 4), no one has the "political mechanisms to make unstable, flexible institutions contribute fairly for the privileges they enjoy" in the hypermodern city.

In such circumstances, it is appropriate to end this section on the theme of total mobilization. This is because in my discussion of the accelerating and intensifying rhythm of reterritorialization across the dromoeconomic and social field I merely alluded to the making of one new dwelling place in the gray zone of the Internet. In so doing, I did not convey what I consider to be another significant aspect of today's hypermodern(organ)izational project(ile)s. For what is characteristic about the important global project(ile)s I have been describing is that they are presently casting aside all 'unnecessary' connections to local or national time-space as a direct result of their abolition of the temporal and spatial distinction between the private and working lives of the population. Fast companies and network enterprises are therefore abolishing such distinctions to make way for the generalized introduction of part-time or even 'zero-hour' contracts of employment, supplemented by the furnishing of a cellphone. Or, as Virilio (2000a: 67; original emphasis) puts it, if "the company needs you, *it calls and you come running*". In the next section, I shall argue that when the company does call, it does so from the accelerated time-space of globalitarianism.

## Globalitarianism

The transition from modernity to hypermodernity is framed by the project(ile)s of hypercapitalism and globalitarianism. Virilio's genealogy (Armitage, 2000b: 38) of globalitarianism begins with the critique of the totalitarian era of Stalin and Hitler and continues today with the critique of the globalitarian epoch of Bill Gates and Time-Warner-AOL. Globalitarianism thus provides those seeking a genuinely critical dialogue on organization with an important alternative conception of the present period to that of the increasingly apolitical banalities of 'globalization' and the 'crisis of the nation state'.

Virilio (Armitage, 2000b: 38) speaks of globalitarianism as the "convergence of time towards...a world time...which comes to dominate local time". Globalitarianism is

therefore a molar project(ile) – a project(ile) comprised of “rigid sedimentations which function according to laws of statistics, so that the effects, precise details, differences and singularities are cancelled out” (Goodchild, 1996: 218). Having defined globalitarianism, I now want to identify it with the molar-project(ile) of militarization that collides with what the American anarchist Woods (2000: 310-313) terms everyday war or the continuing de(con)struction of urban time, space and human existence. However, it is important to make clear that the molar-project(ile)s of globalitarianism and militarization do not inevitably become molecular-project(ile)s or project(ile)s based on “flexible processes, whose nature may be affected by the process or its constituents...working according to specific interactions...occurring in local or small-scale situations” (Goodchild, 1996: 218). From this standpoint, then, it is sensible to consider globalitarianism and militarization as molar-project(ile)s, and to examine the distinctions between them and molecular-project(ile)s as qualitative disparities among the project(ile)s of business corporations, organizations and military institutions.

Globalitarianism is accordingly a molar-project(ile) that, under the technological signs of ‘world citizenship’ and ‘social cybernetics’, control, surveillance, the world market and generalised political, economic and cultural transnationalisation compresses the time-space of the planet through a project(ile) that Virilio labels polar inertia. In other words, thanks to the arrival of ICTs, we are entering a situation in which “it is no longer necessary to make any journey” since “one has already arrived”. But the “consequence of staying in the same place is a sort of Foucauldian imprisonment” because “it means that the world has been reduced to nothing” (Armitage, 2000b: 39). The uncritical corporate hype (‘Where do you want to go today?’ ask the Microsoft advertisements without any hint of irony) surrounding the deployment of the Internet is an instance of how the hypermodern(organ)izational world continues to deny its militarized incarceration and ephemeralization.

The project(ile)s of globalitarianism and militarized ICTs thus call for a re-consideration of the military origins of industrialization and the emergence of transnational business corporations and organizations. In particular, such a re-examination must consider the contemporary increase in international trade rivalry in the context of total mobilization, inclusive of related topics involving the increasing levels of trafficking in women, sex tourism and the repatriation of remittances by growing numbers of migrant workers (Sen, 1995; Sassen, 2001). For globalitarianism, militarization and ICTs are all enmeshed in the uncertainties associated with the integral accident and the hazards connected with the possible detonation of the information bomb. The unpredictable and perilous project(ile)s of globalitarianism and militarization were for example recently at the centre of the cybernetic cyclone during NATO’s still undeclared ‘low intensity nuclear war’ on Serbia in Kosovo in 1999. Moreover, the use of ‘anti-tank killer’ depleted uranium shells by NATO troops has now resulted in the latter’s inability to contain the radioactive dust it left behind either by ‘cordoning off’ the ‘affected areas’ or by treating its increasingly diseased troops (Chossudovsky, 2001). To live with globalitarianism, then, is to live with ‘*global systemic risk*’ (Virilio 2000a: 134; original emphases) in the context of the total mobilization of fast companies, network enterprises and the militarization of all technological and economic, social, cultural and political zones.

In an analogous approach to that of Virilio, Bauman (2001a: 11-28) has produced a critical analysis of the political economy of "wars of the globalization era". Incorporating an examination of 'globalizing wars' directed at the 'abolition of state sovereignty' and the 'neutralising' of its 'resistance potential', Bauman highlights the contemporary significance of the avoidance of "territorial conquest and administrative responsibilities" by the advanced states when at war. Indeed, Bauman argues that globalizing wars threaten the very existence of the nation state. This is because such wars emerge in large part from the expanding number of United States and other transnational business corporations under the guise of promoting 'universal humanitarian cultural values' or 'human rights' for short. Nevertheless, today, transnational corporations are primarily concerned with the elimination of the 'problem' of especially weaker nation states. Accordingly, states such as Serbia and anti-war movements like Radio B92 in Belgrade became the focus of NATO's globalitarian rage during the conflict in Kosovo. But, equally importantly, the spotlight was adjusted from the vantagepoint of a globalizing war conducted from 'orbital space' (Armitage, 2000e). Furthermore, the US directed the war from a position of such aerial strength that to this day it simply refuses to take any administrative responsibility for the disposal and removal of the "thousands of cluster-bombs scattered over Kosovo, anti-personnel weapons that are far more lethal than landmines" (Chomsky, 2000: 133).

Bauman and Chomsky's perceptive descriptions and accurate critique of what Virilio (2000b: 43) calls 'Pentagon Capitalism' also touch on the relations between the US and its allies and involve the termination of the latter's privileged position in the global geopolitical economy of the advanced nations. For, as never before, the project(ile) of globalitarianism has led the US to the "re-launch of the arms race" and "the pursuit of a second deterrence, capable of re-establishing, if not stability in the age of the 'single market', then at least American leadership" (Virilio, 2000b: 36). Triumphant over the "spatial dimensions of the old geo-strategic supremacy of the Atlantic Alliance" by means of the Pentagon's high speed, high-tech "revolution in military affairs", the US is currently bidding for "full spectrum dominance" (Virilio, 2000b: 37-42). There is, then, an increasing disparity between the US arms economy and that of its allies, whose only function appears to be to admit defeat in this developing economic war.

Yet the widening gap between the US arms economy and those of its partners is not merely involved with increasing international trade rivalry. It is also bound up with growing political, globalitarian and cultural imbalances founded on the US conceived and globally enforced understanding of sovereignty and its particular cultural interpretation of human rights. As Chomsky puts it: "One of the leading principles of the new era is that sovereignty may now be disregarded in the interests of defending human rights; disregarded by the 'enlightened states', that is, not by others" (2000: 25). Thus, for Chomsky, political and cultural globalitarianism are the products of a new strain of US imperialism that routinely tortures the concepts of sovereignty and human rights around the globe until they, and its 'enlightened' allies, confess military allegiance to the American flag. What is more, the risks of not professing allegiance to the US are grave. The US State Department, for example, has recently branded China its 'No 1 enemy'. For China to even contemplate living outside of Washington's orbit of influence is therefore to be "perceived as the principal threat to American dominance" and consequently the target of "long-range power projection" (Kettle, 2001). Such



developments have recently been amply demonstrated by the events surrounding China's dangerous confrontation with the US over the latter's 'spyplane' surveillance mission along the Chinese coastline in April 2001. For not only was the Chinese pilot who brought the US' spyplane down to earth on Hainan Island killed in the attempt to abort its mission but the spyplane's crew were detained by the Chinese authorities for several days. Meanwhile, the gutted spyplane remains grounded on Hainan's runway as a potent symbol of contemporary US-Chinese relations.

Chomsky is correct to point to the US' actual rationale for its trade in the rhetoric of human rights. For it is by means of such a trade that is indulged in by all the advanced states that the 'enlightened' sale of military weaponry, training and the inculcation of militarized cultural values can take place. In Indonesia, for instance, the US' trade in the rhetoric of human rights has always been tied to state-approved weapons sales that, according to Chomsky, have amounted to over \$1 billion since Indonesia's 1975 illegal invasion of East Timor. Indeed, in the fiscal year 1997-1998 alone, US state-approved sales of weaponry to the rest of the world soared from \$3.3 million to \$16.3 million, with the UK, France and other 'enlightened' states not far behind in terms of ambition if not in sales (Chomsky, 2000: 67).

Even so, one complication with Chomsky's critique of the US' motivation for trading in the hyperbole of human rights in the context of increased arms sales is that he does not appear to appreciate the full complexity of the 'imposition' of cultural globalitarianism on 'third world' cultures such as Indonesia. It cannot be assumed, for example, that the progressively brutalised peoples of Indonesia are either committed to some alternative model of human rights or that they automatically wish to dispense with their weaponry or the state-sponsored savagery in East Timor and the rest of the archipelago once and for all. In this respect, it is important to recognise that the present-day de(con)struction of Indonesia and other similar countries is not always only the result of Western cultural globalitarianism but can sometimes include indigenous and ancient cultures of militarization. Of course, as Lingis has suggested, the West continues to institute its phallogocentric cultural practices around the world, most notably in the form of the "institution of the dimension of verticality" (1984: 67-68). After all, says Lingis (2000: 187), how else are we to explain the West's propensity for human armies flying at stratospheric heights or the Third World War that it is currently waging on nature itself? It is important, therefore, to seek to appreciate the complex distinctions between the obvious trade in US-style cultural globalitarianism and human rights with third world countries like Indonesia and the often-ambiguous meaning, even suffering, that can arise from the self-initiated experience of militarization. Lingis is surely correct, then, when he writes that the "suffering we see may well be a suffering that does not seek to be consoled" (2000: 50). We must beware, he goes on, "of setting out to alleviate a suffering that another needs and clings to as his or her destiny – the inner torments of Beethoven, the hardships and heartaches of the youth who has gone to join the guerrillas in the mountains ..." (2000: 50).

Lingis' concerns lead us to a second and final difficulty not with Chomsky's position but with Virilio's recent and near-total fixation on the social consequences of the project(ile)s of cultural globalitarianism and militarization. Against Virilio (2000a: 1), I want to suggest that the question of the information bomb cannot be posed in the binary

terms of “The civilianization or militarization of science?”. For to pose the question in this way is to privilege the civilianization over the militarization of science and to ignore or to suppress their perpetual integration into the singularity of technoscience and the resultant and relentless contemporary transformation of everyday life into everyday war. Unlike Virilio, therefore, I argue that the project(ile)s of hypercapitalized fast companies, organizations and military institutions are truly an extraordinary and singularly *networked enterprise*. Similarly, Woods (2000: 310-313) does not differentiate between everyday life and everyday war, proclaiming that “Architecture is war. War is architecture”. Indeed, Woods contends that all identities, inclusive of corporate, organizational and military identities, are “transformational, sliding and shifting in an ongoing complex stream of becoming” (2000: 311). For Woods, then, architecture can be simultaneously construction and destruction or de(con)struction, since both are indispensable to the creation not only of buildings but also fast companies and the networked enterprise of militarization. By its very nature, hypermodern(organ)ization is founded on aggressive and warlike acts, incorporating the dynamiting of sites, an indifference to contemporary culture and the disposal of pure power. This, therefore, is the war universe of the hypermodern city. In short, as Woods writes: “the everyday is not innocent of the violence by which war is usually stigmatized, or elevated, depending on point of view; it merely conceals domestic violence and other forms of physical and emotional aggression under the label ‘abnormal’” (2000: 12). The existence of everyday violence and war therefore raises a challenge to Virilio’s binary question. For it is no longer a question of *either* the civilianization *or* the militarization of science, but rather of how we are to interpret their *fusion* into what might be termed the ‘hypermodern military-scientific complex’ of the twenty first century.

## The Face of Hypermodern(organ)ization Man

In this article I have introduced, considered and examined the concepts and major project(ile)s of hypermodern(organ)ization that frame today’s business corporations and organizations, military institutions, hypercapitalism and globalitarianism. In this conclusion, I want to emphasize some features of my previous discussion and analysis.

To reiterate, in introducing the term hypermodern(organ)ization, I have tried to enter into the time-space of ephemeral environments in order to investigate their significance for everyday social and cultural life from the perspective of hypermodern theory and with a view to developing my own approach to hypermodernity. As I have suggested, the process of ephemeralization foreshadows deep transformations because its development is also the development of configurations dominated by the equalisation and eventual annihilation of the differentiation of economic and social, military, private, public, peaceful and warlike domains. However, the concept of hypermodern(organ)ization is most useful as a way of elucidating an assemblage of *excessive* organizational, institutional and social occurrences that are generally disassociated in time-space. The present period can thus usefully be described as movement from modernity to hypermodernity or perhaps as a shift to what Augé (1995: 7-41) calls the excesses of ‘the near and the elsewhere’ of ‘supermodernity’. For me,

and for Augé, it is the overabundance of the effects of time-space, the individualization of references and uncertainty, speeding and intensifying hypercapitalism that gives rise to the present era of globalitarianism and militarization. It is an era in which what Augé terms our awareness of the 'principles of intelligibility' has disappeared into the realms of ephemerization. It is through a reconceptualisation of modern terms of modernization and organization, then, that I have attempted to demonstrate how my own approach diverges from modern, postmodern and positivist perspectives on the political economy of fast companies and network enterprises as well as military institutions. I noted in my introduction to this article, for instance, that my purpose is to develop the concepts of modernization and organization through an imaginative and, perhaps for some, a provocative engagement with the time-space of hypermodern(organ)ization. None the less, I consider that the principal significance of this article is its discovery of the time-space continuum of the project(ile)s of hypermodern(organ)ization.

In addition, and following Merleau-Ponty, I spoke of the project(ile)s of hypermodern(organ)ization as being accelerated and intensified yet ambiguous, signifying that they are at once unequivocal and, given present historical and cultural conditions, located in the time-space of the in-between or what Bauman calls the current transition from heavy to liquid modernity. However, as noted, I characterise the significance of the current period of hypermodernity in terms of the project(ile)s of hypermodern(organ)ization and hypercapitalism, globalitarianism and militarization.

I also considered the importance of the project(ile)s of hypercapitalism and dromoeconomics for an understanding of the economies of excess, as analysed by cultural theorists such as Richardson and Bauman in relation to the violation of modern shopping norms and the genesis of novel excessive and ephemeral relationships between the project(ile)s of deterritorialization and reterritorialization. These analyses are leading to a re-conceptualisation of the function of cultural norms and values as the obvious concepts for conceiving of excess, to a re-consideration of deterritorialization and reterritorialization and their connections in a hypercapitalist environment increasingly comprised of the absence of cultural norms and the presence of excess. The project(ile)s of hypermodernity, deterritorialization and reterritorialization are therefore accelerating and intensifying the sphere of the ephemeral. Thrown by such project(ile)s into the gray zone of the Internet where the rhythm of reterritorialization quickens and its moody discontents multiply, human subjects are forced to abandon the time-space of geopolitics in the modern city and adapt to the fearful world of chronopolitics in the hypermodern city by those masters of the known universe of total mobilization, the global kinetic elite.

Moreover, and in adopting a hypermodern methodology and theoretical perspective on hypermodern(organ)ization, it soon becomes clear that the project(ile)s of globalitarianism necessitate a critical reconsideration of contemporary technological, political, economic and cultural molar and molecular project(ile)s. Philosophers as different as Virilio and Bauman, Chomsky, Lingis and Woods now question the role of the military in everyday life and war around the world. They are all searching for alternative paths to a hypermodernity that rejects the polarised inertia of militarized and industrialized political economies and the 'humanitarian' cultural values of

globalitarianism. In following such examples, we might focus on Lingis' concern with the link between the phallogocentric culture of the West, the institution of the dimension of verticality and Virilio's conception of cultural globalitarianism. Perhaps our gaze, like that of Lingis, should be turned towards what I have labelled the '(s)lower classes' (Armitage, 2000d), towards a different conception of cultural values in social thought. For Lingis rightly questions analyses that are wholly centred on examining corporate campaigns directed from the top floors of skyscrapers in the hypermodern city or the activities of military personnel soaring off into the stratospheric heights of orbital space. Instead, Lingis (2000: 41-51) makes it clear that, when considering the project(ile)s of hypermodern(organ)ization, one need not always zoom in on the negative repercussions of the Third World War on nature or the joyless reverberations of the globalitarian, hypercapitalist free-trade economy. For instance, writing of the impact that such project(ile)s have had on the sufferings of a Brazilian street kid he met in Rio, Lingis (2000: 51) nevertheless vividly illustrates how the orders of present-day business corporations, organizations and military institutions cannot dampen the resistance of this particular street kid to hypermodern(organ)ization through something as simple as his totally mobilized life on the run. Who knows, caught as he is in the dead centre of the cross hair sights of the project(ile)s of hypermodern(organ)ization, this Brazilian street kid may yet become the youth that Lingis speaks of and join the guerrillas in the mountains? In sum, it is clear that the de(con)structive work of the global kinetic elite, five star generals and even that of anarchists and social theorists does not always produce the results that they would like it to do. Any genuine critical dialogue on organization must understand not only acceptance of the contradictions of hypermodern(organ)ization but also the earthbound resistance of the Brazilian street kid. For his, like ours, is the face of hypermodern(organ)ization man.

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#### the author

John Armitage is Head of Multidisciplinary Studies in the School of Social, Political and Economic Sciences, University of Northumbria, UK. He is an associate editor of *Theory, Culture & Society*, a member of the international editorial board of *The Journal of Visual Culture* and the editor of, most recently, *Virilio Live: Selected Interviews* (2001, forthcoming).

Address: John Armitage, Head of Multidisciplinary Studies, Room 404, Northumberland Building, School of Social, Political and Economic Sciences, University of Northumbria, NE1 8ST, UK.

Email: john.armitage@unn.ac.uk

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# INTRODUCTION

John Armitage

Paul Virilio is perhaps the most provocative French cultural theorist on the contemporary intellectual scene. Renowned for his fascination with the military–industrial complex and for his concept of ‘dromology’, or the logic of speed, Virilio’s theoretical and philosophical writings are enthusiastically received by other contemporary cultural theorists with related concerns, such as Jean Baudrillard. However, Virilio’s increasingly influential and consistently challenging theories introduced in texts like *Bunker Archeology* (1994) and *Strategy of Deception* (2000), remain a source of continual controversy and intellectual debate.<sup>1</sup> By presenting Virilio’s cultural theory in interview form, *Virilio Live: Selected Interviews* offers the reader a new method of approaching his work and the controversies it generates. In this Introduction, the first section delineates Virilio’s biographical history, the significance and theoretical development of his complex and routinely misinterpreted cultural theory. The second section describes the core cultural themes and Virilio’s important theoretical contributions embodied in the twelve interviews selected for this book. The third section provides a theoretical interpretation of these interviews and clarifies their important relationship to the contemporary debate over postmodernism. The penultimate section briefly evaluates the significance of Virilio’s interviews.

## Meet Paul Virilio

As Virilio indicates in the Preface, he was born in Paris in 1932 to a Breton mother and an Italian father. Virilio was evacuated in 1939 to the port of Nantes, where he was traumatized by the spectacle of the *Blitzkrieg* during the Second World War. After training at the École des Métiers d’Art in Paris, Virilio became an artist in stained glass, working with such eminent modernists as Matisse. However, in 1950, Virilio converted to Christianity, and, following military service in the colonial army during the Algerian war of independence (1954–62), he studied phenomenology with Merleau-Ponty at the Sorbonne. Captivated by military space and the organization of territory, Virilio’s early writings appeared while he was acting as a self-styled ‘urbanist’ in *Architecture Principe*, an architectural group and review he established with the architect Claude Parent in 1963. Virilio produced his first major work, a photographic and phenomenological study of the architecture of war, *Bunker Archeology*, in 1975.



After participating in the *événements* of May 1968 in Paris, Virilio was nominated Professor by the students at the École Spéciale d'Architecture. An untrained architect, Virilio has never felt compelled to restrict his concerns to the spatial arts and is the inventor of an array of arresting concepts. These range from the 'oblique function' and the 'trajectory' to 'speed-space', 'chronopolitics', the 'information bomb', the 'integral accident' and the 'strategies of deception'. Virilio's phenomenological works, such as his untranslated *L'Insécurité du territoire* (1976), draw on the writings of Husserl and, above all, Merleau-Ponty. Nevertheless, one reason why Virilio's demanding cultural perspective and philosophical conceptions have only recently begun to influence current postmodern and other cultural debates in the English-speaking world is that he rarely leaves Paris and seldom appears in public outside France. Virilio retired in 1998 and currently devotes himself to writing and working with private organizations concerned with housing the homeless in Paris.

The significance of Virilio's cultural theory stems from his claim that, in a culture overshadowed by war, the military-industrial complex is of fundamental importance in debates over the creation of the city and the spatial organization of cultural life. In *Speed and Politics: An Essay on Dromology* (1986), for example, Virilio offers a credible 'war model' of the growth of the modern city and the evolution of human culture. Indeed, according to Virilio, the fortified city of the feudal period was a motionless and generally unassailable 'war machine' coupled to an attempt to modulate the circulation and momentum of the movements of the urban masses. Hence, the fortified city was a political space of habitable inertia, the political configuration and the physical underpinning of the feudal era. Nonetheless, for Virilio, the essential question is why did the fortified city disappear? Unlike Marx, Virilio postulates that the transition from feudalism to capitalism was not an economic transformation but a military revolution. Broadly, where Marx wrote of the materialist conception of history, Virilio writes of the military conception of history. To be sure, Virilio's somewhat unconventional answer to his own question is that the fortified city disappeared because of the advent of ever-increasingly transportable and accelerated weapons systems. In Virilio's terms, such innovations 'exposed' the fortified city and transformed siege warfare into a war of movement. Henceforth, the efforts of the authorities to govern the flow of the urban citizenry were undermined, heralding the arrival of what Virilio calls the 'habitable circulation' of the masses.

Virilio began his studies in 1958 on the 'Atlantic Wall' – the 15,000 Nazi bunkers built during the Second World War along the coastline of France to repel any Allied assault. Virilio's concepts of the oblique function and the trajectory were to be pre-eminent within the *Architecture Principe* group and review in rendering his contribution to architectural thought using the Gestalt or 'event' psychological theory of perceived mental forms. Such ideas culminated in the construction of a 'bunker church' in Nevers in 1966 and the Thomson-Houston aerospace research centre in Villacoubly in 1969. Subsequently, Virilio broadened his cultural and theoretical scope, arguing in the

1970s that the relentless militarization of the contemporary cityscape was prompting the arrival of speed or chronopolitics and the 'deterritorialization' of urban space. Reviewing the frightening 'dromological' fall-out from the communications technology revolution in information transmission, Virilio enquired into speed-space and started probing the connections between military technologies and the organization of cultural space in *Speed and Politics* and *Popular Defense and Ecological Struggles* (1990). Accordingly, in the 1980s, Virilio cultivated the next important stage of his theoretical work through aesthetic notions of 'disappearance'. Consequently, it is the 'fractalization' of the 'overexposed' city, war, cinema and the 'logistics of perception' that are Virilio's concerns in this period. These interests are the basis of Virilio's *The Aesthetics of Disappearance* (1991), *The Lost Dimension* (1991), *War and Cinema: The Logistics of Perception* (1989) and *The Vision Machine* (1994). Today, Virilio's cultural theory centres on the concepts of 'polar inertia', 'desert screen', the 'art of the motor', the information bomb, the integral accident and the strategies of deception.

Virilio's research seems most relevant to contemporary cultural theory in terms of its critical examination of the experience of the use of remote-controlled and cybernetic technologies such as the Internet. Significantly, other major contemporary cultural theorists such as Bauman (1999), Genosko (1999) and Lash (1999) are increasingly applying Virilio's challenging concepts. Even so, Virilio's most recent cultural theoretical works, such as *Polar Inertia* (1999), *Desert Screen* (2001), *The Art of the Motor* (1995), *Open Sky* (1997), *Strategy of Deception* and *The Information Bomb* (2000) often seem misinterpreted by postmodern cultural theorists such as Waite (1996) and by conservative critics like Sokal and Bricmont (1998). In fact, as we shall see in the sections that follow, Virilio's cultural theory has almost nothing to do with the kind of postmodern cultural theory that abandons all cultural values and, in Virilio's terms, naively celebrates technology. This explains why he characterizes himself as a 'critic of the art of technology'. It is also why I characterize Virilio as a 'hypermodernist', or a critic of postmodern technoculture who still defends the kinds of modernist values abandoned by many postmodern theorists but one who is also aware of modernism's contemporary 'excesses'.

### Virilio live

In Part One, 'On Theory, Culture and Society', my interview with Virilio about modernism and 'hypermodernism' poses questions about the essential turning points of Virilio's life and his description of the background and development of his cultural theory. Here, Virilio explains how the core theme and central importance of his work is the cultural logic of contemporary militarism, and outlines his views of the artistic theory of modernism in the context of my conception of his 'hypermodern' agenda. Arguing that the modern military-industrial complex is developing ominous technological potentialities, Virilio's critique of hypermodern militarism attempts to signal the

significance of the integral accident as well as the sudden changes and upheavals caused by the problem of generalized acceleration. Hence, Virilio conceives of the cultural logic of contemporary militarism as the product of technological speed, observing, 'it is clear that my work is a critical analysis of modernity, but through a perception of technology which is largely ... catastrophic not catastrophist'.

In Part Two, 'On Architecture', the first interview, by the cultural theorist Enrique Limon, turns on Virilio's concept of the oblique function. Here, Virilio explains that the idea of what he calls the oblique function is important because it highlights his philosophical commitment to phenomenology and Gestalt theory. Virilio's is also a commitment fixed on the possibility of a new 'third urban order' of 'topology', 'oriented surfaces' and the notion of putting 'the vertical city on trial'. The second interview, by the architectural critic Andreas Ruby, and published in English for the first time in this book, explains how Virilio's concept of the trajectory springs from the crucial and dromological 'relationship between the object and the subject'. As noted, Virilio's early architectural notions foreshadowed his critiques of speed-space, chronopolitics and computerized interactivity that surfaced in *Speed and Politics*, *War and Cinema* and *The Information Bomb*. It is these critiques that are discussed in Part Three, 'On Speed-Space and Chronopolitics', by Virilio and the three contemporary cultural theorists Chris Dercon, Niels Brügger and Friedrich Kittler.

As Virilio suggests to Dercon, his scepticism concerning the political economy of wealth is driven by his 'dromocratic' conception of power and by his resistance to the Fascist assumptions of Marinetti's Futurist manifestos. Similarly, in his interview with Brügger, translated into English here for the first time, Virilio argues that the political economy of the Greek city-state cannot be characterized under the political economy of wealth. For Virilio, a simple understanding of the management of the economy of the state will not suffice. On the contrary, the histories of socio-political institutions such as the military-industrial complex and artistic movements like Futurism demonstrate that war and the 'capacity for propulsion', rather than commerce and the urge for wealth, were the foundations of Greek culture. It is important to understand that Virilio is not suggesting that the political economy of wealth has been superseded by the political economy of speed. Rather, as he proposes to Brügger, in addition to the political economy of wealth, there is a dromocratic 'hierarchy', the political economy of speed. In his conversation with Kittler, Virilio develops his dromological enquiry to include considerations on the information bomb, 'the bomb that throws us into "real time"', and the catastrophic consequences if it explodes, a moment Virilio calls 'Information Chernobyl'. Here, Virilio describes the rationale of the information bomb as the logic of militarized technoscience in the era of computerized interactivity. For Virilio, then, the current era of interactivity is one in which humanity is gradually being transformed by a caste of 'technology monks' devoted to the construction of a 'new kind of civilization'. Technology monks are therefore the high priests of the new secular ideology Virilio calls

'technological fundamentalism', the religion of all those who believe in the absolute power of information and communications technologies. Thus, in the world according to Virilio, it is the 'monotheism' of cybernetic technologies, such as the Internet, which is responsible for integral accidents like the 1987 world stock market crash, brought about by accelerated automated program trading.

In the first interview in Part Four, 'On Art, Technoculture and the Integral Accident', with art critic Jérôme Sans, Virilio suggests that cultural theory must take account of interruptions in the rhythm of human consciousness or the 'mental persistence of the image'. Articulating his concept of 'picnolepsy' (frequent interruption) while alluding to Einstein's General Relativity Theory, Virilio argues that modern vision is the product of military power and time-based cinematic technologies of disappearance. Further, although there are political and cinematic aspects to our visual consciousness, what is indispensable to them is their ability to designate the technological disappearance of the grand aesthetic narratives and the advent of micro narratives. From Virilio's perspective, 'images have become a new form of light' that we cannot yet comprehend. In fact, for Virilio, people remain fascinated by the 'spectacularity' of the 'third window', the artificial light of TV and computer screens.

Significant here is Virilio's interview with the art critics Dominique Joubert and Christiane Carlut. Voicing his concerns about the aesthetics of disappearance, Virilio skilfully links the latter concept to the disappearance of poster art in the city and the crises of the physical dimension that he first raised in *The Lost Dimension*. As Virilio suggests, the 'logistics' of 'urban perception' are critically concerned with the disappearance of messages and signs into a militarized and cinematographic field of information transmission, stylization and the endless resequencing of film, video and TV images. In other words, the 'virtual screens' of advertising 'propaganda' have replaced the city walls.

In the following interviews with the art critics Catherine David and Pierre Sterckx, Virilio emphasizes his concept of 'delocalization' when discussing different kinds and works of contemporary art. Displaying a marked similarity to the poststructuralist Derrida's idea of 'deconstruction', Virilio's chief concern is with the links between art, spatial and temporal dislocation and the current 'event landscape' of absolute speed. According to Virilio, delocalization and the event landscape arise because, in the context of the ongoing 'virtualization of art', human actions no longer occur in 'real space' and, as a negative consequence, are 'devoid of references'. For Virilio, therefore, the art world – like the commercial world of advertising and consumerism – is presently 'disappearing' into the realm of computer images, a development he calls art's abandonment of its inscription on the terrain of the earth. Virilio thus conceptualizes a cybernetic delocalization where technological culture and technological creativity become detached from the 'here and now' and move into cyberspace or, as in the case of the Australian cybernetic performance artist Stelarc, invades and colonizes the corporeal space of the individual body. In the interviews with David and Sterckx, then, Virilio passionately

questions the modification or the replacement of the human by the machine, arguing that contemporary art is witnessing the 'crucifixion' of the human body by the technologies of acceleration. Moreover, according to Virilio, technological dislocation not only results in the disappearance of the 'here and now' but also in the appearance of the 'virtual portal' or, 'the meeting of spectres' with the 'God of technology'. Delocalized art is thus distinct from traditional art, where the images produced are images of real space and time. Instead, it is an art where the difference between the images of real space and time are 'spectralized' or made 'telepresent' by the 'teletechnologies' of the mass media at 'the dark spot of art'. Analogous perhaps to the spirit of Lyotard's famous *Les Immatériaux* exhibition at the Beaubourg in Paris in 1985, Virilio's bold assertion in the interviews with David and Sterckx is that the plastic arts are dead. However, Virilio's perspective on the delocalization of art is consistent with his view that the only way to comprehend the development of contemporary art is to question its accelerating 'temporality' in the era of cybernetic globalization.

In the final, previously unpublished, interview in Part Four, with the cultural theorist Nicholas Zurbrugg, Virilio characterizes himself as a visionary, virtually painting with words, in order to clarify the hazards of polar inertia in the era of technoculture animated by alternating catastrophes and positive discoveries. Virilio begins with an examination of the disparity between 'new technological breakthroughs' such as 'a new kind of ship or plane' and the new kinds of integral accidents to which they give rise. He then goes on to explain the discrepancy between absolute speed and inertia in the development of technoculture in twentieth-century Western art. Outlining what he sees as the negative tradition of techno-evangelism stretching from Marinetti's Futurist enthusiasm to what he sees as the eugenicism implicit in Stelarc's modification of the human body, Virilio deplores the extent to which sustained intellectual and creative resistance to the nullifying impact of technology is almost non-existent. While celebrating the ways in which early twentieth century artists resisted the technologies of their time, Virilio argues that few artists and scientists seem to be resisting the seduction of contemporary technologies, concluding that it is all the more important for cultural critics to identify the 'accidents' of their time. For Virilio, the important thing to do now is to 'fight against' technology rather than 'sleep' before it. On the one hand, therefore, 'the most exciting thing' for Virilio is that 'every time a new technology appears, art diverges from it'. On the other, Virilio rather dramatically warns that in the 'positive' work of Marinetti, technoculture invariably becomes a kind of 'Fascist impulse'. For Virilio, most intellectuals and artists are virtually 'asleep' in front of the new technologies that they uncritically endorse. And cybernetic artists such as Stelarc are not so much to be welcomed as bearers of good tidings, but as feared prophets embodying the 'end' of both their own humanity and of 'a certain kind of art'. Virilio's interview with Zurbrugg therefore demonstrates his sense that apart from rare exceptions such as the work of video installation artists Bill Viola and Michael Snow, contemporary culture produces few important artistic works.

In the last part of the book, Part Five, 'On the Strategies of Deception', my second interview with Virilio elaborates on his most recent writings in *Strategy of Deception* and *The Information Bomb*. In this final interview, Virilio develops a critique of the informational and technological strategies employed in the Kosovo war by the European Union (EU) and the North Atlantic Treaty Organization (NATO) against the rule of Slobodan Milošević in Serbia in 1998–9. Nevertheless, as Virilio observes in this specially commissioned interview, his is a critique of what he describes as 'strategically correct thinking'. Certainly, for Virilio, it is critical to reject the 'catastrophic modalities' of fusing military and humanitarian affairs through an analysis of the 'successful' strategy of the United States (US) and by resisting its domination of the EU and NATO. According to Virilio, then, 'cyberwar' is a form of US imperialism that is presently conducted through the development and deployment of the US's 'Revolution in Military Affairs' and what he now calls the 'military-scientific complex'. Moreover, by abandoning the political sensibility required in order to understand the emergence of the US's 'second deterrence' based on cyberwar, the EU and NATO have finally capitulated to 'the detonation of the information bomb'.

#### **Virilio: live and direct**

As becomes evident, Virilio's interviews offer compelling reading in terms of the ways in which they informally anticipate his subsequent more elaborate theoretical writings. Offering a major part of his ongoing analysis of contemporary culture, Virilio fascinatingly elucidates his general contributions to current debates addressing postmodernism and highlights how he can perhaps be best understood as what I would term a hypermodern critic of the art of technology.

Virilio's interviews are most significant, perhaps, because they move beyond the increasingly unproductive existing debate over the distinction between modernism and postmodernism. As my interview with Virilio in Part One indicates, for example, Virilio forcefully disassociates his ideas from what he sees as the uncritical superficiality of most postmodern cultural theory, arguing that he does 'not feel linked at all with postmodernity'.

Similarly, as Virilio's interviews with Limon and Ruby clearly indicate in Part Two, his architectural theory and practice are neither a reaction against modern architecture in general nor a reaction against the International Style in particular. Indeed, for Virilio, postmodern architecture is quite simply a catastrophe. Virilio's hostility to postmodern architecture is not hard to fathom since his own architectural work draws on the 'Brutalist' later architectural style of Le Corbusier, a project founded on exposed concrete and the dramatic collision of large oblique forms. Consequently, in his interviews with Limon and Ruby, Virilio not only acknowledges the modernist influence of Merleau-Ponty's phenomenology but also that of Gestalt theory and Einstein's writings on General Relativity Theory.

Furthermore, in the interviews in Part Three, Virilio argues that he perceives few links between his cultural theory and that of the works of post-structuralist cultural theorists such as Foucault's *Discipline and Punish* (1977). For instance, Virilio informs Brügger that, unlike Foucault's theories of incarceration, his theories are concerned with our 'imprisonment in speed'. In addition, and in contrast to Foucault, Virilio maintains that he is a humanist and a practising 'Anarcho-Christian'. Virilio's cultural theory thus runs counter to the perspective of anti-humanism and to the political and vehemently anti-Christian philosophy of Nietzsche, a thinker often cited approvingly by poststructuralists such as Foucault. Hence, there are only ambivalent, if occasionally convergent associations between Virilio's philosophical works and Foucault's poststructuralist texts. As Virilio suggests in his conversation with Kittler, in the era of information monotheism, he sees the 'greatest danger of all' as the prospect of a 'slide into a future without humanity'.

Moreover, as Virilio's interviews in Part Four significantly demonstrate, unlike many postmodern cultural theorists, he still defends modernist cultural values. In this way, Virilio characterizes his cultural theory as a critical examination of modernism's relationship to questions of technological perception, speed and the aesthetics of disappearance. Directing his gaze towards the literature, music and painting of high modernism, Virilio enthusiastically cites such leading modernist creators as Franz Kafka, Charlie Parker and Paul Klee. In turn, as Virilio stresses in his interview with David, his approach to postmodernism offers a critique from the viewpoint of past values, rather than a cynical celebration of the end of the world of human presence. It is in this sense of critiquing the most recent technological developments in post-modern culture in terms of modernism that Virilio is a visionary hyper-modern thinker.

If Virilio defends certain postmodern practitioners, then it is because of the continuity between their work and the work of the earlier modern – and premodern – writers and thinkers that he admires. But at the same time, as Virilio indicates in his interview with Zurbrugg, he seems to find himself to be permanently at war with the 'Fascist impulse' that he perhaps rather mechanically equates with the Italian Futurist tradition.

Finally, as Virilio suggests in Part Five, his cultural theory of war also differs significantly from that of postmodern cultural theorists of war such as Baudrillard (1995). Unlike Baudrillard's cultural writings and interviews on war, for example, Virilio's war-strewn texts and conversations remain true to the idea of understanding human history, even as it crashes 'headlong into the wall of time'. Undeniably, nearly the whole of my discussion with Virilio on the strategies of deception is a sustained effort to comprehend the recent historical events that took place during the conflict in Kosovo. In this final interview, Virilio also questions the demise of the concept of a 'just war', contending that the idea of a just war must be rescued from its present deterioration into little more than 'secular holy war'. Far from sharing a Baudrillardian sense that perhaps 'the Kosovo War did not take place', Virilio argues that the very

real significance of the Kosovo conflict is that it escalated warfare into the still more terrifying dimension of 'orbital space'.

In sum, as Virilio's interviews indicate, the complexity of his vision repeatedly advances *beyond* many of the more complacent assumptions of dominant postmodern cultural theory. By offering Virilio's cultural theory live and direct in interview format, *Virilio Live: Selected Interviews* allows the reader to share some of Virilio's most stimulating accounts of his ideas and the debates that they have initiated.

### Questioning Virilio

Clearly, Virilio's cultural theory – and his interviews – court controversy. Virilio writes in the Preface, for example, that, for 'thirty years now I have held a professorship of architecture, and I know from experience that talk can provoke'. In other words, Virilio is well accustomed to high praise and to exasperated antagonism from architectural colleagues as well as to the hostility that occasionally arises from the twelve interviewers in this book to some of his more questionable assertions.

In Part One, for instance, I attempt to clarify the most affirmative dimensions of Virilio's cultural theory by defining them as aspects of a hypermodern perspective, rejecting many of the more negative conclusions of those who equate postmodernism with the collapse of all values. Virilio, I suggest, is most important as a defender of past values in the face of present crises.

In Part Two, Virilio's discussions of the trajectory, and of 'an architecture that understands the human body as a space-determining element', leads to Ruby's suggestion that Virilio's are the only writings that comprehend the human body and its environment in such a manner within contemporary architecture. Ruby is, of course, also referring here to the general disregard by other architects of Virilio's texts and, in particular, his remarkable existential meditation on the architecture of war in *Bunker Archeology*. Nevertheless, in the interview with Ruby, Virilio's reaction to modern architecture's neglect of his focus on the 'energized' human body is not one of despair. Rather, echoing his late philosopher friend, Deleuze, Virilio enthuses that the energized human body is a body 'with reflexes and anticipatory qualities, a body that is constantly in-becoming'. Yet, as Virilio indicates to Ruby, he senses that many modern architects 'have lost the dimension of the body that Vitruvius or Le Corbusier had but without gaining anything new in the process'. It is not necessary to labour the point that Virilio has a constructive approach both to sympathetic criticisms and to the denigration of his work through the provision of parallel examples taken from the rest of this book. What is necessary is to re-emphasize the fact that what *Virilio Live: Selected Interviews* confirms is the theoretical, cultural and social insight of this extraordinary critic of the art of technology. Virilio's achievement in these interviews is therefore that of successfully alerting the reader to the contemporary ascendancy of inauspicious visions of buildings turned into time-based



images, speed-space, chronopolitics, technological culture, the integral accident and the strategies of deception.

Nonetheless, it is also important to signal that, today, Virilio's cultural theory and interviews are also the subject of critical admonition from Waite and others not for their similarities but for their dissimilarities from postmodern cultural theory. For such authors, Virilio, the world's only critic of the art of technology, remains an interesting but flawed critic of the art of *modernist* conceptions of technology.

### Conclusion

At their most original, Virilio's writings and interviews on contemporary culture offer an indispensable beginning to our understanding of the consequences of dromology – or of cultural speed and acceleration – for contemporary society. As I have suggested, his work is most crucial in terms of the ways in which it has instituted a speed-based philosophical examination of hypermodern cultural and social experience that is increasingly influential among other cultural theorists of advanced societies. Virilio's frequently misunderstood and contentious phenomenological writings therefore stand apart from postmodern cultural theory. Consequently, through the presentation of Virilio's work in interview style, *Virilio Live: Selected Interviews* testifies to the originality of his cultural theory. It also demonstrates the inadequacy of postmodern cultural theorists' rejection of modernism and modernity when analysing recent political events such as the war in Kosovo. In these respects, this critic of the art of technology is associated with Merleau-Ponty's phenomenological critique of the positivistic view of perception, the body and subjectivity as well as with Deleuze's poststructuralist anarchist critique of Freudian psychoanalysis and Marxist economic reductionism. Unlike these philosophers, however, Virilio neglects to consider his cultural theoretical differences with postmodernism. His writings are thus open to Waite's charge that they remain embedded within the realm of modernism. For others, though, Virilio's cultural theory and interviews represent the beginning of a fascinatingly affirmative hypermodern analysis of the latest mutations in cybernetic society.

### Note

1. In this Introduction I shall refer only to Virilio's most important writings and make use of the English translations of such works. Virilio's main texts in French and English are detailed in the Select Bibliography of the Works of Paul Virilio in this volume.

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## THE KOSOVO W@R DID TAKE PLACE

Interview with John Armitage

1 *Stratégie de la déception: a position statement by Paul Virilio*

Under the Mirabeau bridge flows the Seine  
 And our loves  
 Should I remember them  
 The days are passing, I remain

(Extract from 'The Mirabeau Bridge' by  
 Guillaume Apollinaire, recited by Paul  
 Virilio at the beginning of his statement  
 and adopted by him as his position toward  
 the Internet)

Dear friends, since my new book, *Stratégie de la déception*, has only just been published, and you have not yet been able to read it, I thought it would be of interest to you if I first of all outlined the book's main points before we proceed to the interview.<sup>1</sup>

This book is first and foremost the outcome of my refusal of what I call 'strategically correct thinking'. By this term I mean not only to reject the catastrophic modalities of the intervention against Slobodan Milošević's Serbia but also to reject absolutely the idea of fusing military and humanitarian affairs. In this respect, I am against the invention of 'secular holy wars', and especially in the name of a so-called 'duty to intervene'. However, I do share with my friend Bernard Kouchner – and who is now the United Nations' (UN) proconsul in Kosovo – the idea of a 'right to intervene', as long as such rights are exercised through the auspices of the UN. I am, therefore, against establishing a duty to intervene *per se*. To my mind, the idea of a duty to intervene amounts to a return to 'the state of nature', a return to the veritable 'war of all against all'. This, then, is the background to the thinking contained in my new book and constitutes an introduction of sorts.

Now, if someone were to ask me what my perspective is on the Kosovo War I would answer the question in the following manner: *the Kosovo War was a fool's war*. It was a fool's war first of all because, to put it in the words of a British friend of mine, it was the first time that a 'fly' like Kosovo could boast that it effectively occupied the fly paper!

However, for the United States (US), the Kosovo War was a successful war. This is because the US not only engineered the strategic failure of NATO but also successfully challenged the legitimacy of the UN. But for us Europeans, the Kosovo War resolved nothing at all. For instance, the chief outcome of the Kosovo War in Europe is not merely an *increase* in the number of displaced people, inclusive of Serbs and gypsies, but also an increase in the number of privately run militia groups and Mafia-type gangs. Nevertheless, for the US, the most significant results of the Kosovo War are, first, the successful development and deployment of the 'Revolution in Military Affairs' (RMA) and second the re-launching of the military-industrial complex, or, as it should be re-titled today, the military-*scientific* complex. The term RMA, of course, refers to the new military theories of information, communication and technology associated with the techno-scientific development of 'cyberwar'. But what is important for us in Europe to note about the role of the US in the Kosovo War is that it *conducted an experiment on Europe in the same manner that it did on Japan at the end of the Second World War*. For the US, therefore, Kosovo was used as an experimental test site for the further development of the RMA. And, for me, such experiments are of great significance. For example, about ten years ago, I went to Japan and met with a number of provincial governors. However, while I was there, I took the opportunity to speak to them about nearby Hiroshima and the dropping of the atomic bomb at the end of the Second World War. And one of the governors said to me: 'We Japanese are originally a military nation, a nation of warriors and farmers. We do not blame the Americans for having won the Second World War, or for having killed soldiers and even civilians. That is acceptable. What we reproach them for is the fact that, at Hiroshima and Nagasaki, they conducted an experiment on us.' I will never forget this sentence! For neither the Japanese nor we Europeans are laboratory animals!

But, you may ask, what was the nature of the US RMA experiment and why were the Americans so keen to use Kosovo as a test site? My interpretation is that such an experiment was necessary because the US is presently seeking to establish what I call the 'second deterrence'. Let me remind you that the 'first deterrence' was nuclear deterrence, an 'absolute deterrence' founded on the energy of atomic particles. The first deterrence was introduced in the period between 1945 and 1950. Thus, the period of the first deterrence predates the era of 'mutual deterrence' between the East and the West. All the same, what is significant about the era of the first deterrence is that the US was the sole possessor of nuclear capability. Today, therefore, we are presently entering a period that resembles the period of the first deterrence. There is, though, one crucial difference: the era of the second deterrence is based on cyberwar. And, as I have said many times before, the development of cyberwar is one of the chief results of the detonation of what I call 'the information bomb'. The information bomb is a bomb that is similar to the atomic bomb but only to the extent that it is a device based on energy. However, whereas the atom bomb was triggered by the energy of the atom, the information bomb is triggered by the energy of information and communications technologies. As I noted

some time ago: 'if *interactivity* is to information what *radioactivity* is to energy, then we are confronted with the fearsome emergence of the "Accident to end all accidents", an accident which is no longer *local* and precisely situated, but *global* and generalized.'<sup>2</sup>

Let me be clear: the information bomb is a new type of weapons system. And this is a very important point for me, because, as I have argued in numerous books, historically, progress has depended upon the speed of three very different types of weapons systems.<sup>3</sup> The first of these weapons systems is the system of 'obstruction weapons' (fortifications and so on). One cannot, for instance, understand the nature of the Great Wall of China or any modern urban centre without reference to obstruction weapons. This is because no fortress or city has ever managed to survive without fortifications. The second of these weapons systems is the system of 'destructive weapons' (cannon balls, atomic bombs and so on). Destructive weapons destroy the fortifications. Moreover, destructive weapons have reigned supreme from the Middle Ages to the twentieth century. Equally importantly, the continued development of destructive weapons is the chief reason why we invented the whole idea of deterrence or what I call 'pure war'.<sup>4</sup> The third of these weapons systems is the information bomb, the system that is currently being put into place. It is a weapons system founded on information and communications technologies, inclusive of the Internet.

As a result, we can say that the first point to make about the Kosovo War is that it was a cyberwar. It was a cyberwar that took place in the 'orbital spaces' inhabited by information and communications technologies. There is, therefore, a major distinction to be made between the war that took place in the Persian Gulf in 1991 and the war that took place in Kosovo in 1999. For, unlike the classic air and land war that was the Persian Gulf War, the Kosovo War took place in orbital space.<sup>5</sup> For example, in the intervening period between the Persian Gulf War and the Kosovo War, Cruise missiles were transformed by the politicians into '*Crusade* missiles'! But, of course, we have to ask ourselves what kind of crusade it was? What are its results? The results are plain for all to see. For instance, we can see that, for all the humanitarian rhetoric of the politicians and the high technology deployed by the military, the Kosovo adventure has resulted in victory only for the privatized warriors and the paramilitary outfits of the warring sides. That is, for the Mafia and for the Serbian gangs.<sup>6</sup> This can only be described as a catastrophe. For example, when the Allies liberated France in 1944–5 – and I for one am really thankful to them for liberating my country – it would have been considered a disaster if state power had simply fallen into the hands of the Resistance! There would have been civil war and, in all likelihood, France would have been turned into a so-called 'People's Republic', as happened in Eastern Europe. For another important and contemporary example, one needs only to look at the role played by the militias, paramilitary and special police intelligence troops in East Timor, troops that were trained by the US at the beginning of the Suharto period in 1965.

These points, then, are the launch pad for my refusal of the strategically correct form of thinking that was adopted by NATO towards the crisis in Kosovo. By the way, my refusal earned me a lot of criticism in France because some people seemed to think that my refusal meant that I was pro-Milošević. I am anti-Milošević. But my anti-Milošević stance was not the sole basis of my refusal. Indeed, I refused strategically correct thinking for one very good reason: *one does not bomb a civil war from the air. Period.* For me, the bombing of Kosovo amounted to *an air war waged against civilians*. For instance, it is interesting to note that, and unlike the civilians, during the war, the official military personnel on both sides were treated as if they were a protected species. This is what I call an '*ecological putsch*'!

But let's return to the important question of why the Kosovo War was, principally, an air war. In my view, the most significant aspect of the Kosovo War in this respect was the idea that air superiority is the present-day equivalent of nineteenth-century naval superiority. The idea of air superiority conjures up the spectre of 'Global Air Power' (GAP). Thus, if we look at what took place during the war in Kosovo, we can easily see that it was not a war that took place on the horizontal level, as was the case with all wars that have taken place since the time of Napoleon. It was a war that took place in the air, in orbital space. For example, at one stage, there were over fifty reconnaissance, radar and eavesdropping satellites orbiting above Kosovo, not to mention the Global Positioning Systems, the 'Blackbird' spy planes flying at very high altitudes, the manned reconnaissance flights at 15,000 feet, and, under that ceiling, the unmanned drones. Unmanned drones are, of course, nothing but flying cameras. However, such important developments illustrate exactly what I noted almost twenty years ago in *War and Cinema*.<sup>7</sup> For, in that book, I suggested that unmanned drones were to cyberwar what intercontinental ballistic missiles were to nuclear war. Unmanned drones are weapons systems concerned with the collection and communication of information, whereas ballistic missiles are weapons of destruction. Thus one can assert that the Kosovo War was indeed a cyberwar. The idea was that, as automation takes command of the barracks, one could dispense with troops, just as when automation takes command of the factory, the idea is that one can dispense with the proletariat. Of course, the results are the same: both soldiers and workers are made redundant. One could also say much the same about the fully automated and unmanned NASA space expeditionary rockets such as Voyager. Such rockets are the Cruise missiles of the space programme.

In my analysis, therefore, the results of the Kosovo War are twofold. For Europe, the result is that the war has not only solved nothing but it has also increased the numbers of displaced civilians. For the US, however, the result of the war is it allowed for the successful further development of the RMA and the military-scientific complex. But in order to conduct a cyberwar two other essential components are required if the experiment is to be a success. The first component is the idea of 'Global Information Dominance' (GID). The General in charge of GID at the Pentagon is Andrew Marshall. Marshall is the driving force behind the notion of the second deterrence and the

Director of the Office of Net Assessment. In other words, he is in charge of the development of cyberwar. The basic idea of GID is to *revolutionize information and communication technologies in all possible realms*. The second component of cyberwar is one that I have already mentioned and that is GAP. The development of GAP has been entrusted to the US Air Force and to the US Space Command. However, what is crucial to note about both these components of cyberwar is that they are totally 'deterritorialized' and, to a large extent, 'virtualized'. Here, of course, we meet face to face with the historical traditions of Anglo-Saxon military culture. It is a culture based on naval power and the absence of attachment to physical territory.

Deterritorialization is a modern term for what the British admirals of old used to call 'the strategy of the fleet in being'.<sup>8</sup> But, where in the old days the theatre of operations resided in the Atlantic or the Pacific Ocean, today it resides in the air, in orbital space. *This is an extraordinary strategic and political revolution!* We can say, therefore, that the destructive weapons, gunboat politics and diplomacy of yesteryear have now been extended, through the application of information and communications technologies, into the air. For example, let us look at the kind of pressure that was exercised by Commodore Perry's destroyers in 1853 against Japan. Perry was trying to force Japan to 'open up', to engage in trade. Is it not the same logic that is being put to work again today? But, this time, in the air? Aren't those automated Cruise missile air strikes against Sudan, Afghanistan, Iraq and now Kosovo a form of long-range naval gunnery? Of course, such automated air strikes are not in the hands of the militias and the paramilitary groups warring in Kosovo but in the hands of the US state in the form of the highly secretive National Imagery Mapping Agency (NIMA). Thus, while the NIMA supplies the US with its 'Big Eyes', the National Security Agency (NSA) supplies it with its 'Big Ears'! Consequently, the development of the RMA revolution also implies a revolution in the secret services and in intelligence gathering on an unprecedented scale. This is also why the current debate over cryptography is so significant.

Today, then, the US is embarking on a line of research that involves the construction and deployment of spy satellites with a view to setting in train an optical form of surveillance and control based in the air. For example, surveillance used to take place orally, or in writing. But, nowadays, the surveillance of civilians only takes place optically. For me, therefore, *seeing is surveillance*. When we used to talk about optics, for instance, we used to refer to Galileo's eyepiece, to the telescope, and to the optical discovery of the universe. Now, through its militarization, *optics has become an airborne vision machine*.<sup>9</sup> This is a theme of major interest to me, since recent developments in optics also imply developments in aesthetics. For example, when people say to me that ours is the epoch of the civilization of the image, I say no! It is the epoch of the militarization of airborne optics. Gaston Bachelard once said that 'every image is poised for enlargement' and, to my mind, this is exactly what is happening to optics today. What we are faced with, then, is the globalization of the image, the terminal enlargement of the image. And this is what I call the orbital utopia of the *Global Eye!* However, and although the *Global Eye* is a



utopia, it is a utopia that is a constituent part of ongoing military research into unmanned drones and cyberwar.

Before we proceed to the interview, let me conclude by emphasizing the following points about the Kosovo War. First, while the US can view the war as a success, Europe must see it as a failure for it and, in particular, for the institutions of the European Union (EU). For the US, the Kosovo War was a success because it encouraged the development of the RMA. The war provided a test site for experimentation, and paved the way for emergence of what I have called the second deterrence. It is, therefore, my firm belief that the US is currently seeking to revert to the position it held after the triggering of atomic bombs at Hiroshima and Nagasaki in the 1940s, when the US was the sole nuclear power. And here I repeat what I suggested at the beginning of my position statement. The first deterrence, nuclear deterrence, is presently being superseded by the second deterrence: a type of deterrence based on the information bomb and the new weaponry of information and communications technologies. Thus, in the very near future, and I stress this important point, *it will no longer be war that is the continuation of politics by other means, it will be the integral accident that is the continuation of politics by other means.*

The automation of warfare has, then, come a long way since the Persian Gulf War. Needless to say, none of these developments will help the plight of the refugees in Kosovo or stop the actions of the militias operating there. However, the automation of warfare will allow for the continuation not only of war in the air but also of the further development of the RMA, GID and GAP. It is for these reasons that, in my new book, I focus for example on the use of the 'graphite bomb' to shut off the Serbian electricity supply as well as the cutting off of the service provision to Serbia of the EuTelSat television satellite by the EU. And, let me remind you that the latter action was carried out against the explicit wishes of the UN. To my mind, therefore, the integral accident, the automation of warfare and the RMA are all part of the shift towards the second deterrence and the explosion of the information bomb. For me, these developments are revolutionary because, today, the age of the locally situated bomb such as the atomic bomb has passed. The atomic bomb provoked a *specific* accident. But the information bomb gives rise to the integral and *globally constituted* accident. The globally constituted accident can be compared to what people who work at the stock exchange call 'systemic risk'. And, of course, we have already seen some instances of systemic risk in recent times in the current Asian financial crisis. But what sparked off the Asian financial crisis? Automated trading programs!

Here, then, we meet again the problems I noted earlier with regard to interactivity. Moreover, it is clear that the era of the information bomb, the era of aerial warfare, the era of the RMA and global surveillance is also the era of *the integral accident*. Cyberwar has nothing to do with the destruction brought about by bombs and grenades and so on. It is specifically linked to the information systems of life itself. It is in this sense that, as I have said many times before, interactivity is the equivalent of radioactivity. For interactivity

effects a kind of disintegration, a kind of *rupture*. For me, the Asian financial crisis of 1998 and the war in Kosovo in 1999 are the prelude to the integral accident of the year 2000. Now, my friends, to the interview!

## 2 'The Kosovo W@r Did Take Place': interview with John Armitage

### From geopolitics to psychopolitics

JA: Professor Virilio, I would like to start by charting your theoretical and architectural interest in questions concerning the two concepts of military space and the organization of territory. For example, even your earliest research – into the 'Atlantic Wall' in the 1950s and 1960s – was founded on these two concepts. Moreover, your most recently published study, *Stratégie de la déception*, is a study of military space and the organization of territory within the context of the recent Kosovo War. However, before we discuss *Stratégie de la déception* and the war in Kosovo in some detail, could you explain what you mean by military space and the organization of territory and why these concepts are so important for an understanding of your work?

PV: These concepts are important quite simply because I am an urbanist. And, may I remind your readers yet again; I am not a philosopher. Thus the whole of my work is focused on geopolitics and geostrategy. However, a second aspect of my work is movement. This, of course, I pursue through my research on speed and my study of the organization of the revolution of the means of transportation. For me, then, territory and movement are linked. For instance, territory is controlled by the movements of horsemen, of tanks, of planes, and so on. Thus my research on dromology, on the logic and impact of speed, necessarily implies the study of the organization of territory. Whoever controls the territory possesses it. Possession of territory is not primarily about laws and contracts, but first and foremost a matter of movement and circulation. Hence I am always concerned with ideas of territory and movement. Indeed, my first book after *Bunker Archeology* (1994) was entitled *L'Insécurité du territoire* (1976).<sup>10</sup>

JA: To what extent does your intellectual and artistic work on the architecture of war, and architecture more generally, inform your thinking in *Stratégie de la déception*? Is it the case that, in common with other so-called 'postmodern' wars, such as the Persian Gulf War in 1991, the architecture of war, along with architecture itself, is 'disappearing'? How did you approach the question of the architecture of war and its disappearance in *Stratégie de la déception*?<sup>11</sup>

PV: Well, let me put it this way, I have always been interested in the architecture of war, as can be seen in *Bunker Archeology*. However, at the time that I did the research for that book, I was very young. My aim was to understand the notion of 'Total War'. As I have said many times before, I was among the first people to experience the German Occupation of France during the Second World War. I was 7–13 years old during the war and did not really internalize its significance. More specifically, under the Occupation, we in Nantes were denied access to the coast of the Atlantic Ocean. It was therefore not until after the war was over that I saw the sea for the first time, in the vicinity of St Nazaire. It was there that I discovered the bunkers. But what I also discovered was that, during the war, the whole of Europe had become a fortress. And thus I saw to what extent an immense territory, a whole continent, had effectively been reorganized into one city, and just like the cities of old. From that moment on, I became more interested in urban matters, in logistics, in the organization of transport, in maintenance and supplies.

But what is so astonishing about the war in Kosovo for me is that it was a war that totally bypassed territorial space. It was a war that took place almost entirely in the air. There were hardly any Allied armed personnel on the ground. There was, for example, no real state of siege and practically no blockade. However, may I remind you that France and Germany were opposed to a maritime blockade of the Adriatic Sea without a mandate from the UN. So, what we witnessed in Kosovo was an extraordinary war, a war waged solely with bombs from the air. What happened in Kosovo was the exact reversal of what happened in 'Fortress Europe' in 1943–5. Let me explain. Air Marshall 'Bomber' Harris used to say that 'Fortress Europe' was a fortress without a roof, since the Allies had air supremacy. Now, if we look at the Kosovo War, what do we see? We see a fortress without walls – but with a roof! Isn't that disappearance extraordinary?!

JA: The results of the *Architecture Principe* group in the early 1960s were a review, a theory of the 'oblique function', and the construction of a modern 'bunker church' in Nevers.<sup>12</sup> And, as you have already indicated, your architecture has always been a highly *politicized* architecture. What kinds of links, if any, were there between the work of *Architecture Principe* on the oblique function, the bunker church, politics and the conduct of the war in Kosovo?

PV: Many things could be said about *Architecture Principe* and the oblique function. But much of it belongs to another age. However, I could say a few things about the bunker church in Nevers and the war in Kosovo. First of all, one must remember that the church was dedicated to St Bernadette of Lourdes. Naturally, had it been dedicated to St Francis of

Assisi, it would have been a different church. It would have been a transparent church, a church for the birds! Second, it is important to remind you that, in 1858, St Bernadette saw the Virgin Mary in the grotto at Lourdes. Nevertheless, at the time that the bunker church was built, in 1966, it was in the middle of the Cold War, in the middle of the balance of nuclear terror. And, of course, the emblematic building *par excellence* was the atomic shelter. My church is meant to be an architectural equivalent of all that. At the time I said that, in the present day, a church could only refer to the eventuality of total destruction. Hence the bunker church is not modelled after its German namesake. Instead, it is modelled after – and is a pointer to – the atomic shelter. In other words, the atomic threat to a particular territory had become a threat to the whole of the earth. Thus it is a political architecture. I am a Christian. But I am also *totally* committed to the political issues and struggles of the times I am living in!

Yet not everyone shares my politics or my particular Christian vision. For example, when the bunker church was consecrated by the local bishop, the priest, who was conducting the ceremony, was walking around the building and performing the sign of the Cross. Now, the public, myself included, was inside the church. Consequently, we did not know what was going on outside because we were patiently waiting for the mass of consecration to begin. However, a few years ago, the priest told me that while the bishop was outside consecrating the church, he was constantly muttering to himself the following words: 'What a ghastly thing! Amen! What a ghastly thing! Amen!' At this point, my friend the priest turned towards the bishop and said: 'Monsignor, this is not an exorcism! It is a consecration!' [Laughs]

Still, for me, the bunker is the archetypal symbol of deterrence. The nuclear shelter and the underground corridors, for instance, are part of the urban infrastructure in a country like Switzerland. There are nuclear shelters stocked with food in all Swiss cities. We have lived with them for forty years! But now, all this has been forgotten. But not by me!

As to the conduct of the war in Kosovo, it is really difficult to formulate an answer to the question of how to concretize it. This is not simply because it was an 'occult' war but also because it was a small and yet very important one. I would say that the whole ex-Yugoslavia conflict, a conflict that has been going on for almost ten years now, is principally about militias and paramilitary outfits. Above all, what we have witnessed is the reappearance of the 'war entrepreneur', that is, of the 'privatization of war'.<sup>13</sup> It is a kind of return to fifteenth-century warfare, a return to the era of the warlord. In this regard, the Kosovo War represents a regressive development in terms of international warfare. If you compare the situation in Kosovo to the beaches of D-day or the big battles like the one that took place at Stalingrad, it is clear that what we are seeing is the end of national or international wars and warriors and the return to private wars and warriors.

JA: Would it be correct to say that *Stratégie de la déception*, like the bulk of your other writings, is principally informed by a phenomenological philosophical approach to the Kosovo War? What, for you, are the advantages and disadvantages of such an approach to questions of strategy and deception?

PV: War, even before it sets about organizing the battlefield, is primarily about organizing the field of perception. In that respect, I am fully a phenomenologist. But I am also, and in the deepest sense, a strategist. For the strategist *sees* the full extent of the battle, even before he dispatches his tacticians and soldiers into it. And it is from there that not only *Stratégie de la déception* but also *War and Cinema* emerged. So, in that sense, yes, I am an 'old warrior' in phenomenology.

JA: In *Stratégie de la déception*, in what ways, if any, did you find the work of Einstein helpful in explaining the military space of Kosovo and the temporal organization of Balkan territory?

PV: I did not find the work of Einstein helpful at all! In fact, the first page of my new book opens with a quotation from Vauvenargues and it is a quotation that happens to answer your question very well. It reads as follows: '*La raison nous trompe plus souvent que la nature*' (Reason misleads us more often than nature). For me, then, it was the reasoning employed by the NATO war-chiefs that was completely misled by the nature of the terrain in Kosovo. The Kosovo War was a war that saw a movement away from 'geostrategy' and a movement towards 'chronostrategy', the strategy of speed. For example, when the US Secretary of State Madeleine Albright launched the US's Cruise missiles, she thought the Kosovo War would be over in three days. It lasted three months! And therein lies the catastrophe. Had it indeed lasted for three days, it would have been a success. But three months is an abject failure from a chronostrategic point of view.

JA: Recently, I was thinking about the exhibition of your photographs organized prior to the publication of *Bunker Archeology* in 1975 at the Museum of Decorative Arts in Paris. I was wondering if you were asked to organize an exhibition on the architecture of the war in Kosovo today what sort of things you might put in it?

PV: Aerial views! Satellite photos! Pictures taken by drones! I would very much like to make an overview of all these different views from above!

JA: Throughout the Kosovo conflict, via the mass media, we were constantly bombarded with the now familiar language of postmodern warfare. For example, 'Rock 'n' roll' was, apparently, the code name for the beginning of NATO air strikes on Serbian military forces. Is the relationship between the mass media, language and warfare an important relationship for you and your work in *Stratégie de la déception*?

PV: Well, let me begin with a story about the code name used for the Allied landing in Normandy, a codename used to alert the Resistance movement in France. It was a verse taken from a poem of Verlaine's and which went as follows: '*Les sanglots longs des violons de l'automne/ Brisent mon coeur d'une langueur monotone*' (The long sighs of autumn's violins/break my heart with monotonous languor). The first part of this verse was the forewarning, while the second part was the signal for the actual landing operations. Now, how can you compare this key phrase from fifty years ago with the phrase 'Rock 'n' roll' today? Make up your own mind. However, let us be clear: the Kosovo War was a war of the 'politically correct'. Indeed, one cannot understand that war without an understanding of what I call 'NGO-Speak'. For example, an illustration of NGO-Speak is the way in which the NGOs inflated terms such as genocide. It was nothing less than outrageous propaganda in the name of humanitarianism. It was a crusade. And the use of the language of the crusade in such situations is something that I, as a Christian, *cannot stand*! The abuse of the vocabulary of the crusades is well drawn if one compares the war against the Serbs with the war against the Nazis. In the war against the Nazis there was no talk of crusades. Why? *Because it was not needed*! But back then, things were much clearer for everyone: everyone knew they were being oppressed.

JA: In addition to the language of postmodern warfare and the politically correct during the conflict in Kosovo, media institutions such as the BBC and CNN also subjected those of us outside Serbia to the imagery of postmodern warfare. Is the role of media imagery during the Kosovo conflict a key element of your thinking in *Stratégie de la déception*?

PV: No, on the contrary. In fact, I believe that, during the Kosovo War, as opposed to the Persian Gulf War, it was the discussions that took place in the press, in the realm of the spoken word, and on the radio, that were more important than TV imagery. This is because there was an element of surprise in the Gulf War that, through live coverage, I would say, stunned the audience. However, with respect to the Kosovo War, people were already accustomed to this sort of imagery. So, what was needed was more emphasis on the message, a reinforcement of content as it

were, and this is where newspapers and magazines played a key role alongside radio broadcasts. In this sense, it was not television imagery but radio broadcasts that were the most important element in the Kosovo War. Having said that, it is also true to say that we were fed a lot of repetitive images of the conflict in Kosovo. For instance, we were fed a lot of images of refugees. But, in the end, this strategy simply did not work. Why? Because it looked like a TV show, a kind of 'telethon war' but featuring the wounded, the sick and the handicapped.

*JA:* Although it is well known that you are unsympathetic to psychoanalytic interpretations of human behaviour, I wondered whether the Kosovo War writings of psychoanalytically influenced and radical cultural theorists such as Slavoj Žižek had had any impact on your analyses of the war? Žižek, for example, noted how the media tended to elevate Milošević into the 'embodiment of evil' while presenting President Clinton as the instrument of a 'higher law': almost of God Himself. How do you respond to such interpretations?<sup>14</sup>

*PV:* Well, first of all, I do not have a psychoanalytic background or training. It is not my world. Hence, I do not have very much to say in this respect. Yet it is clear that given the region of the world where the Kosovo War took place the psychoanalytic dimension is of crucial importance. However, I recently met Claudio Magris, a great writer. And I was very impressed by his intelligent explanation of that region. I believe that one would need to ask a writer, not necessarily someone with a psychoanalytic background, but a writer, to portray the Kosovo War. I believe that a person like Magris could do it very well.<sup>15</sup> But, then again, Peter Handke did it. However, in my opinion, he did it very badly. I disagree with Handke, of course, because he took a pro-Serbia stand. How could I agree with that?<sup>16</sup> As for Žižek, I do know of him by name but I have not read him.

#### **From economic warfare to ethnic cleansing**

*JA:* A number of cultural and social theorists on the left sought to explain the Kosovo conflict largely in economic terms – in terms of the needs of US imperialism in Europe and elsewhere. Edward Said, Professor of Comparative Literature at Columbia and long-time Palestinian activist, for example, spoke of the US's naked 'display of military might', while others talked of the US's need for strategic and economic advantage in relation to Europe in the era of economic globalization. Is the economic dimension of the war in Kosovo an important one for your analysis in *Stratégie de la déception*?<sup>17</sup>

PV: What Said refers to as a naked display of military might, I have called *an experiment*. But, yes, of course, an economic analysis of the war is important. However, I do not touch upon this aspect of the Kosovo War in my new book because I was writing it during the war itself. Additionally, I had enough material to handle! And I was much more taken by the new air and information gathering strategies. Thus, I did not delve very deep into the economic dimensions of the war. But, yes, I do believe that the economic aspects of the Kosovo War are very important. For instance, one cannot dissociate cyberwarfare from economic warfare. They are indissociable. But, please remember that my new book is not a magnum opus! It is just a small book! *[Laughs]*

JA: Do you think that responsibility for the war in Kosovo can be said to lie with particular individuals such as Slobodan Milošević or with the British Prime Minister, Tony Blair? Or was the war the outcome of other, perhaps deeper, structural factors such as the development of the mass media?

PV: I do not think that one should only focus on individuals. Indeed, one should consider much deeper factors like the media. Look at what took place at the Rambouillet conference. What Rambouillet made clear was that, today, diplomacy – and particularly the diplomats – have lost their power to the media, to the Internet, and to the ‘live’ coverage of events. The problem is that things are moving so fast today that all serious issues are now debated and decided in the context of an emergency. And, on the international plane, issues are only discussed if they already represent an emergency. However, diplomacy needs time and lots of talking. It is a spoken intelligence, a specific kind of discourse. But it is a discourse that does not suit the epoch of multimedia networks.

JA: While the mass media played an important role during the Kosovo conflict, it soon became evident that the Internet was also perceived to be playing its part in the war. Radio B92, via OpenNet, for example, continued broadcasting through Real Audio streaming long after the Serbian authorities removed its signal. Despite the fact that you are a vehement critic of the Internet, don’t you think that, in cases like the above, the Internet can be perceived as a technology of liberation?<sup>18</sup>

PV: As I have said before, for me, the Internet, as Aesop might put it, is at the same time the worst and the best of all things. That being said, the Kosovo War was indeed the first Internet war. That makes it interesting in its own right. However, I must say that I am surprised that, so far, no



proper evaluation of the role of the Internet in the Kosovo War appears to have been forthcoming. After all, the Internet is normally a technology that seems to be able to manage its own public relations. I would be really interested in such an evaluation since I do not have enough information about the part played by the Internet in the Kosovo War myself. To me, this is a very important issue because the Kosovo War was truly the inspiration for the inauguration of democracy on the Internet. Of course, I have been aware of the Internet for years now. For example, I invited Nicholas Negroponte here to the Ecole Spéciale d'Architecture over twenty years ago. That was when he was working with the 'Architecture Machine Group'.<sup>19</sup> So, it would be wrong to suggest that I am against the technological environment of the Internet. My position, as I indicated in my position statement prior to this interview, is that I want to be objective about it in order that I can maintain a distance from it, something that, so far, the majority of French people have totally failed to do. Thus what annoys me about the Internet is, first, the hype surrounding its deployment and second, the denial of critique, particularly surrounding its military development.

*JA:* Conversely, what role do you think the Internet and cyberspace played in the strategies of deception developed and deployed by the NATO military command and control structure?

*PV:* It is clear that, from a military perspective, the Internet can play the same role as radio jamming. Let us take an example: during the Second World War, one could not listen to Allied radio stations without experiencing a disturbing and ear-splitting noise. It was not a very sophisticated form of jamming. However, in my opinion, nowadays, it is on the Internet where jamming takes place. But the Internet does not jam in the same way that radio does. This is because, today, jamming takes the form of information confusion and the Internet is the premier site of such confusion. As I point out in *Stratégie de la déception*, censorship is no longer concerned with the addition or the subtraction of information but with *the multiplication of information* on a given subject. In this way, the multiplication of information jams any sensible interpretation. As the architect Mies van der Rohe said, 'Less is more'. However, in our case, we could say that more is less! That sums up the risks of the Internet.

*JA:* Even so, it seems to me that, in the context of the Kosovo War, both the anti-militarists like Radio B92 and the pro-militarists in NATO were using the same technology: the Internet. Today, then, it appears that both opposing a war and prosecuting one involves the use of the same

technology. How do you interpret this situation? Is there no longer any other way of challenging the social implications of the cultural logic of late militarism and its role in the culture of 'hypermodernism'?<sup>20</sup>

PV: I believe that we have entered the era of cyberwarfare. As a result, any opposition to militarism must no longer take the form of an opposition to the armed forces and their weaponry, as in the old days of pacifism. This is because, today, opposition to war is also opposition to the cybernetic perversion of information. And this, of course, is what cyberwarfare is all about. For instance, some twenty years ago, I was not simply an active participant in the non-violent anti-war movement but also writing my book on *War and Cinema*. Moreover, I was at that time already criticizing the 'logistics of perception' and the misuse of film with a view to producing cyberwar. However, my friends in the anti-war movement told me that such claims made no sense and that my position was not militant enough. I replied that while it was true that one can march through the streets with placards demanding that we 'Ban the Bomb' or 'Rid the World of Poison Gas' one cannot easily march through the streets shouting 'Down with flight simulators!', 'Down with cameras!', or 'Down with the Internet!' On the other hand, this example does show that, as early as the 1980s, such questions were starting to appear. It also illustrates the perversity of the military revolution.

JA: Doesn't the perversion of information, its links with the Internet and movie cameras, raise *new* social and cultural questions *other* than those associated with the military revolution? For example, doesn't the corruption of sexual information and its connections with the Internet in the shape of 'live' Webcams of women's bedrooms (e.g. 'Jennycam') and so on present new and critical questions about Foucault's conception of social control and the metaphor of the 'Panopticon'?<sup>21</sup> It seems to me that, far from being uneasy about insidious forms of visual policing and surveillance, many people today appear to become anxious if they are *not* subject to the piercing gaze of the technologized Other. Moreover, such people are even willing to invest in the Internet precisely in order that they can control their own – in this case sexual – behaviour for the enjoyment of the technologized Other. What are your views on this phenomenon?

PV: I completely agree. But, here too, exhibitionism and voyeurism are two faces of the same phenomenon. Indeed, for me, this is one of today's great questions. For what we are seeing here is *the desire to become a film oneself*. Nowadays, no one wants to become a real man or woman, a hero, or even a star. *They want to become a film!* This goes way beyond

what Andy Warhol was alluding to when he said that, in the future, we would all be famous for fifteen minutes. For example, for the Romans, the goal of life was to become a statue, to become like Caesar. Now, however, for us, the increasingly hyped aim of life is the celebration of the human being but mediated through film. But wanting to become a film means not only wanting to show oneself to others but also wanting to *confirm one's own existence*. Such a desire on the part of women or men is, like Webcams themselves, tragic. You see there is something of a loss there. That said, these are some of the very big questions I would like to write about eventually.

JA: For me, one of the most interesting and alarming developments in the Kosovo conflict was the fact that Milošević and the other Serbian state elites appeared to take great pride in destroying Serbia's own economic and social infrastructure. Moreover, this reminded me very much of your discussion of the Nazi state and its power during the Second World War in *L'Insécurité du territoire*. For, in the essay entitled 'The Suicidal State', you write of how Hitler's Total War and decolonization policies eventually led to the erection of 'the suicidal state'.<sup>22</sup> Do you think that it would be legitimate to make a comparison between the strategy of the Serbian State and that of the Nazi State?

PV: Well, first of all, comparison is not reason. Or, as a friend of mine said, 'to compare is not to prove'. Milošević is not Hitler. So much is clear. But it is true that Milošević has suicidal tendencies. But what is true for Milošević and for Serbia is also true for a number of others and their countries. Look at Cambodia or any number of other countries, particularly in the Islamic world. Look at Iraq, Afghanistan and Iran. The suicidal state has a promising future! But let us be clear. Today, the phenomenon of the suicidal state is linked to the crisis of the nation-state, a crisis that is linked to globalization, and to the current parlous state of many modern governments. And it is clear that, in this context, Milošević has a suicidal tendency. But the same can be said of Algeria, if not of its President, Bouteflika. However, it was Hitler who inaugurated the suicidal state. And, of course, after Hitler came the invention and the explosion of the atom bomb, an invention that only reinforced the suicidal tendency through the *truly* suicidal policy of Mutually Assured Destruction (MAD). In this sense, we are all Hitler's children.

JA: In *Speed and Politics: An Essay on Dromology* (1986), you write of the military and political revolution in transportation and information transmission. Indeed, for you, the speed of the military-industrial complex is the driving force of cultural and social development, or, as you

put it, 'history progresses at the speed of its weapons systems'. In what ways do you think that speed politics played a role in the military and political conflict in Kosovo? For instance, was the speed of transportation and information transmission the most important factor in the war? Or, more generally, for you, is the military-industrial complex still the motor of history?<sup>23</sup>

PV: I believe that the military-industrial complex is more important than ever. This is because the war in Kosovo gave fresh impetus not to the military-industrial complex but to the military-scientific complex. You can see this in China. You can also see it in Russia with its development of stealth planes and other very sophisticated military machines. I am of course thinking aloud here about new planes such as the Sukhois. There is very little discussion about such developments but, for me, I am constantly astonished by the current developments within, for example, the Russian air force. And, despite the economic disaster that is Russia, there are still air shows taking place in the country. For these reasons, then, I believe that the politics of intervention and the Kosovo War have also prompted a fresh resumption of the arms race worldwide. However, this situation has arisen because the sovereignty of the nation-state is no longer accepted. This is also why we are witnessing states rushing forward in order to safeguard themselves against an intervention similar to the one that took place in Kosovo. This is one of the most disturbing, if indirect, aspects of the war in Kosovo and one that I discuss at length in my new book. Of course, one of the most disturbing features is the fact that while we have had roughly a ten-year pause in the arms race where a lot of good work was carried out, this period has now come to an end. For what we are seeing at the present time are new developments in the production of anti-missile weaponry, drones and so on. Thus, some of the most dramatic consequences of the Kosovo War are linked to the resumption of the arms race and the suicidal political and economic policies of countries like India and Pakistan where literally tons of money is currently being spent on atomic weaponry. This is abhorrent!

JA: In *Popular Defense and Ecological Struggles* (1990), you argue that the 'principle aim of any truly popular resistance is thus to oppose the establishment of a social situation based solely on the illegality of armed force, which reduces a population to the status of a movable slave, a commodity'. To what extent do you think that such an aim characterized the popular resistance of the Kosovo Albanians in opposing Milošević's efforts to reduce them to the status of movable slaves, of commodities?<sup>24</sup>

- PV: First, I believe that there is an ethnic and religious dimension to the conflicts in the Balkans that vastly complicates the issues of democratic resistance and military power. But it is nevertheless self-evident that countering Milošević was a necessity, within the Serbian State, within the ex-Yugoslavia Federation and outside it, at the level of the EU, and on the part of the US. For me, though, it was the *political methods and military techniques* that were used that were disastrous and, in the end, counter-productive in terms of popular resistance. For example, such methods greatly accelerated ethnic cleansing. Moreover, they led to a situation similar to that which currently exists in Iraq, another situation where not only has nothing been solved but also where the fly is proud to occupy the fly paper!

**From the disintegration of the nation-state  
to the second deterrence**

- JA: It is now some twenty years since you and Alain Joxe founded the Interdisciplinary Centre for Research into Peace and Strategic Studies (CIRPES) at the House of the Human Sciences. Looking back, how, if at all, has the research you undertook into peace and strategic studies in the late 1970s informed your work in the late 1990s in works such as *Stratégie de la déception*?
- PV: Alain Joxe took a stand in favour of the NATO intervention. We remain friends but differ on this issue since I was against the intervention of NATO. However, the work we did at CIRPES anticipated many situations. It even played a part in shaping French cabinet ministers' opinions, such as Alain Joxe's brother, Pierre Joxe, and Jean-Pierre Chevenement. But the one thing that we did not anticipate – our mistake if I might put it that way – was the break up not only of the Soviet Union but also of the other surrounding states. This is a very important point because, today, there is the very real threat of the disintegration of *all* nation-states. We did not see that coming. Nor did we anticipate the regression towards a situation where the Mafia or the paramilitaries of privatized warfare would begin to dominate the world political scene.
- JA: Before we turn to consider the aesthetic aspects of the 'disappearance' of military space and the organization of territory in Kosovo, I would like to ask why it was that in the late 1970s and early 1980s you first began to consider the technological aspects of these phenomena? What was it that prompted you to focus on the technological aspects at that time?
- PV: Because it was from that time onwards that *real time superseded real space*! Today, almost all current technologies put the speed of light to

work. And, as you know, here we are not only talking about information at a distance but also operation at a distance, or, the possibility to act instantaneously, from afar. For example, the RMA *begins* with the application of the speed of light. This means that history is now rushing headlong into the wall of time. As I have said many times before, *the speed of light does not merely transform the world. It becomes the world. Globalization is the speed of light. And it is nothing else!* Globalization cannot take shape without the speed of light. In this way, history now inscribes itself in real time, in the 'live', in the realm of interactivity. Consequently, history no longer resides in the extension of territory. Look at the US, look at Russia. Both of these countries are immense geographical territories. But, nowadays, immense territories amount to nothing! Today, everything is about speed and real time. We are no longer concerned with real space. Hence not only the crisis of geopolitics and geostrategy but also the shift towards the emergence and dominance of *chronostrategy*. As I have been arguing for a long time now, there is a real need not simply for a political economy of wealth but also for a political economy of speed.

*JA:* But what about the cultural dimensions of chronostrategy? For instance, although modernist artists such as Marinetti suggested to us that 'war is the highest form of modern art', Benjamin warned us against the 'aestheticization' of war. Additionally, in *The Aesthetics of Disappearance* (1991), you make several references to the relationship between war and aesthetics.<sup>25</sup> To what extent do you think that the Kosovo War can or should be perceived in cultural or aesthetic terms?

*PV:* First of all, if I have spoken of a link between war and aesthetics, it is because there is something I am very interested in and that is what Sun Tzu calls 'the art of war'. This is because, for me, *war consists of the organization of the field of perception*. But war is also, as the Japanese call it, 'the art of embellishing death'. And, in this sense, the relationship between war and aesthetics is a matter of very serious concern. Conversely, one could say that religion – in the broadest sense of the word – is 'the art of embellishing life'. Thus, anything that strives to aestheticize death is profoundly tragic. But, nowadays, *the tragedy of war is mediated through technology*. It is no longer mediated through a human being with moral responsibilities. It is mediated through the destructive power of the atomic bomb, as in Stanley Kubrick's film *Dr Strangelove*.<sup>26</sup>

Now, if we turn to the war in Kosovo, what do we find? We find the manipulation of the audience's emotions by the mass media. Today, the media handle information as if it was a religious artefact. In this way, the media is more concerned with what we *feel* about the refugees and so on rather than what we *think* about them. Indeed, the truth, the reality of

the Kosovo War, was actually hidden behind all the 'humanitarian' faces. This is a very different situation from the one faced by General Patton and the American army when they first encountered the concentration camps at the end of the Second World War. Then, it was a total and absolute surprise to find out that what was inside the concentration camps was a sea of skeletons. What is clear to me, therefore, is that while the tragedy of war grinds on, the contemporary aesthetics of the tragedy seem not only confused but, in some way, suspicious.

*JA:* Almost inevitably, reviewers will compare *Stratégie de la déception* with your earlier works and, in particular, *War and Cinema*. Indeed, the very first chapter of the latter book is called 'Military force is based upon deception'. Could you summarize the most important developments that, for you, have taken place in the relationship between war, cinema and deception since you wrote *War and Cinema*?

*PV:* For me, Sun Tzu's statement that military force is based upon deception is an extraordinary statement. But let us start with the title of *War and Cinema*. The important part of the title is not *War and Cinema*. It is the subtitle, *The Logistics of Perception*. As I said back in 1984, the idea of logistics is not only about oil, about ammunitions and supplies but also about *images*. Troops must be fed with ammunition and so on but also with information, with images, with visual intelligence. Without these elements troops cannot perform their duties properly. This is what is meant by the logistics of perception.

Now, if we consider my latest book, *Stratégie de la déception*, what we need to focus on are the other aspects of the same phenomenon. For the strategies of deception are concerned with deceiving an opponent *through* the logistics of perception. But these strategies are not merely aimed at the Serbs or the Iraqis but also at all those who might support Milošević or Saddam Hussein. Moreover, such strategies are also aimed at deceiving the general public through radio, television and so on.

In this way, it seems to me that, since 1984, my book on the logistics of perception has been proved totally correct. For instance, almost every conflict since then has involved the logistics of perception, including the war in Lebanon, where Israel made use of cheap drones in order to track Yasser Arafat with the aim of killing him. If we look at the Gulf War, the same is also true. Indeed, my work on the logistics of perception and the Gulf War was so accurate that I was even asked to discuss it with high-ranking French military officers. They asked me: 'How is it that you wrote that book in 1984 and now it's happening for real?' My answer was: 'The problem is not mine but yours: you have not been doing your job properly!' [*Laughs*]

But let us link all this to something that is not discussed very often. I am referring here to the impact of the launch of the television news service CNN in 1984 or thereabouts. However, what I want to draw your attention to is CNN's so-called 'Newshounds'. Newshounds are people with mini-video cameras, people who are continually taking pictures in the street and sending the tapes in to CNN. These Newshounds are a sort of pack of wolves, continually on the look out for quarry, *but quarry in the form of images*. For example, it was this pack of wolves that sparked off the Rodney King affair a few years ago in Los Angeles. Let us consider the situation: a person videos Rodney King being beaten up by the cops. That person then sends in the footage to the TV station. Within hours riots flare up in the city! There is, then, a link between the logistics of perception, the wars in Lebanon and the Gulf as well as with CNN and the Pentagon. But what interests me here is that what starts out as a story of a black man being beaten up in the street, a story that, unfortunately, happens all the time, everywhere, escalates into something that is little short of a war in Los Angeles!

JA: Your discussion of Newshounds reminds me of an interesting story about the media written by the veteran Polish reporter Ryszard Kapuscinski. In the piece, Kapuscinski describes how, during a trip to Mexico, he unexpectedly found himself in the middle of a riot. However, as luck would have it, he met a cameraman whom he knew and who happened to be shooting video footage of the riot. But when Kapuscinski asked his friend: 'What's happening here, John?', his friend merely replied: 'I don't have the faintest idea. I just get the shots. I send them to the channel, and they do what they want with them.' For me, this is a very interesting statement because it highlights how the notion of the logistics of perception is no longer restricted to the military sphere but is, in fact, now part of the civilian arena. In this example, the cameraman is supplying images to the front line, but the front line is no longer the war room but the newsroom!<sup>27</sup>

PV: This is exactly what I mean! And, as in your example, one finds that the logistics of perception are not only military and civilian but also linked to general policing. The logistics of perception can, for example, be linked to the phenomenon of private detectives, to tele-surveillance, and to the phenomenon of 'watching-at-a-distance'. The logistics of perception are thus highly political. This is because they bring in their wake the phenomenon of total surveillance. Watching-at-a-distance also brings with it a sort of multiplier effect. For instance, if we consider the Rodney King affair, there was no sense of proportionality between the content of the videotape and the ensuing riots in Los Angeles! The same sort of thing happened with the O.J. Simpson court case. But what is



important to remember is that, after the entire world saw Simpson being followed in his car on TV, what followed was a totally bogus TV court case. Here, again, we not only saw the multiplier effect at work but an effect that *completely distorts the nature of the court case and the entire judicial system!* The Simpson trial was a parody of justice! And the same thing currently applies to the absurd court case surrounding the death of Princess Diana. Today, therefore, *all* cities are overexposed. London was overexposed at the time of Diana's funeral. New York was overexposed at the time of Clinton's confessions concerning Monica Lewinsky. All this belongs to what I call 'the overexposed city'.<sup>28</sup>

JA: I would like to return to Sun Tzu if I may? I'm curious as to whether you believe we can still look to Sun Tzu's *The Art of War* for an understanding of wars such as the one that took place in Kosovo? Or, is it the case that so-called postmodern wars are simply too far removed from Sun Tzu's ancient world?

PV: No. For me, it is Clausewitz who is outdated, not Sun Tzu. Today, it is *the accident and not wars that are the continuation of politics by other means!* This is a post-Clausewitzian concept. This is due to the fact that Sun Tzu has a much more fluid approach to the question of war. It is also a very interesting approach and reflects the profound Chinese way of thinking more generally. For example, the Chinese often describe power in terms of water. And water cannot be stopped from flowing. Thus the Chinese do not compare war with fire since fire can be stopped. But what has happened to war today? In the old days, there were two armies at war. One army lost the war and the other won. There were rules. *Victory or defeat was a given.* Each was definitive. *But, nowadays, there is never a victory.* Everyone loses. There is no definitive result. And this is why Sun Tzu's writings are still relevant. He wrote about warring kingdoms. In today's terms, therefore, he was already writing about the privatization of warfare, about wars that are constantly changing their shape like water does as it traverses the territory. For Sun Tzu, then, as for me, war is concerned with a form of movement that can be compared to water. War is no longer about confrontation. However, one could say that, during the war in Kosovo, the form of the movement should not be compared to water and its waves but to electromagnetic waves! Indeed, the Kosovo War was an electromagnetic flood! In this sense, the war of the airwaves in Kosovo had a maritime quality to it. As I have written before in *Speed and Politics*, this is very similar to the strategy of 'the fleet in being'. But, in this case, the fleet in being is moored in the waters of immateriality, in the airwaves. In addition, this fleet cannot only carry images and sounds but also engage in 'tele-action', in action-at-a-distance. Thus, in essence, the Kosovo War took place in Hertzian

space, in the electromagnetic ether. In this sense, the Kosovo War was a postmodern war. For example, what we saw in Kosovo was the return of gunboat diplomacy and the return of the fleet in being. But the fleet took to the air in the form of Cruise missiles. And, although I know that Alain Joxe would not agree with me, this is why, for me, we are in a post-Clausewitzian era. For me, therefore, Clausewitz should be taken to the Cenotaph! [Laughs]

JA: But what about those masters of the fleet in being, the jet pilots? For example, in his book *Mythologies* (1993), the semiologist Roland Barthes speaks of 'The jet-man' as the 'elimination of speed', as a man who inhabits a technological condition that, in contemporary societies, is verging on the sacred. And, of course, the US Air Force jet pilots were a constant feature of the Kosovo War as far as the media were concerned. What aspects, if any, of the role of the jet pilots in the Kosovo conflict were important for you?<sup>29</sup>

PV: Well, there is no doubt that, today, the professionals in the armed services are given the attributes of the Gods. They are the Gods of ubiquity, instantaneity and immediacy. But, as far as the jet pilots are concerned, to me, they are the survivors of a bygone age. The jet-man is the 'last man'. He is the last man before automaton takes command. For, right now, very sophisticated forms of automated piloting systems are replacing flying crews in the US Air Force and elsewhere. And these automated systems are not simply made up of observation drones but also of fighter and bomber drones that are the equivalent of the Typhoons, Mustangs, P51s, and Lightnings of the Second World War. For me, therefore, the fighter pilot is the last man. He was indeed the hero who led the war in Kosovo but he did so without risk to his own life. For a hero, this is not a very comfortable position to be in. For instance, when Peter Townsend became a national hero in England with his Spitfire, he had taken great risks and had helped the Royal Air Force save England from the Nazis. However, to me, the jet pilots of the Kosovo War are survivors of an age that has already passed. As in the NASA space programmes, it is now too expensive to send astronauts to Mars, so one launches the Voyager probe, or the Mars Pathfinder.

JA: To what extent do you think that the jet pilots contribute to their own elimination? I ask this question because, during the Kosovo conflict, I was watching a British ex-Air Marshal talk on TV one evening and he spoke about how the speed of the jet's technological systems contributed to the infamous and tragic incident where the jet pilots mistook a convoy of tractors and trailers for a row of tanks. It was an incident that

killed many innocent civilians. However, what interested me was that the ex-Air Marshal went on to say that this incident was the result of what is known as 'taxi ranking' among jet pilots. Broadly, taxi ranking means that when one pilot sees what he thinks is a row of tanks and calls back to base to report his sighting, all the other jet pilots are immediately sent into the air. But, when they arrive on the scene, they do not check the first pilot's sighting or question whether what they are about to fire at is actually a row of tanks. As far as they are concerned, it *is* a row of tanks and they fire without hesitation. Consequently, one error by a jet pilot travelling at speed is multiplied into a catastrophe. What is your opinion?

*PV:* Indeed! In fact, I remember that when I was a small boy during the Second World War, I was bathing with friends near a river. And moored on the river nearby was an abandoned boat, a war launch. Suddenly, we were startled by an American Thunderbolt flying overhead. It was about to strafe the war launch. But, before it did so, the pilot *saw* that we were bathing there, and he made a turn. We saw him and he waved back at us because he could see that we were happy it was an American plane. He went off without firing a round of ammunition. You see, unlike today, where the planes fly very high, the Thunderbolt flew very low and we could actually *see* the pilot in the cockpit as he waved at us as we stood on the banks of the river.

*JA:* Do you think, given tragic incidents such as the mistaken attack on a civilian convoy, that it is conceivable to characterize the Kosovo War not as the deliberate outcome of 'rational' political and military forces but as one more 'accident' on the road to nowhere, on the road to the end of modernity?

*PV:* [*Laughs*] Well, first of all, I do not believe that the war in Kosovo was an accident! Indeed, I think it has helped the Americans to develop the notion of the accident through the use of graphite bombs, through the cutting off of the EuTelSat signal, and through the so-called 'accident' of the bombing of the Chinese embassy. So, for me, the war in Kosovo was one in which the Americans took part, but they did so in a rational manner. But that was not the case with the participation of the Europeans. This is because, militarily speaking, the European Union was not, at that juncture, in charge of its own destiny. The Americans imposed the strategy that was applied in the war in Kosovo on the EU. For the Americans, then, the strategy was a success. But *for us*, for us Europeans, and for NATO, the strategy was a failure. Now, I readily concede that many people believe that while the UN lost the war in Kosovo, NATO won it.

But, for me, NATO *also* lost. Naturally, when I suggest this to people, just as I suggest it in *Stratégie de la déception*, I am arguing that the US is currently seeking global domination through the establishment of what I call the second deterrence. And this second deterrence is a form of deterrence that cannot be shared with the EU or anyone else. This, then, is *my* interpretation and it is an interpretation that I am adamant about. But let me make it absolutely clear: I am not anti-American. In fact, I often prefer Americans to the French! Indeed, my position is that, while, on the one hand, I love Americans, I am wary of America. On the other hand, while I *love* France, I am very suspicious of the French!

#### From sightless vision to secular crusades and beyond

- JA: In *The Vision Machine* (1994) you were concerned with highlighting the role of the military in the 'contemporary crisis in perceptive faith' and the 'automation of perception' more broadly. Has the Kosovo War led you to modify your claims about the role of the military in the contemporary production and destruction of automated perception via Cruise missiles, so-called 'smart bombs' and so on?<sup>30</sup>
- PV: On the contrary. The development and deployment of drones and Cruise missiles involves the continuing development of the vision machine. Research on Cruise missiles is intrinsically linked to the development of vision machines. The aim, of course, is not only to give vision to a machine but, as in the case of the Cruise missiles that were aimed at Leningrad and Moscow, also to enable a machine to deploy radar readings and pre-programmed maps as it follows its course towards its target. Cruise missiles necessarily fly low, in order to check on the details of the terrain they are flying over. They are equipped with a memory that gives them bearings on the terrain. However, when the missiles arrive at their destination, they need more subtle vision, in order to choose right or left. This, then, is the reason why vision was given to Cruise missiles. But in one sense, such missiles are really only flying cameras, whose results are interpreted by a computer. This, therefore, is what I call 'sightless vision', vision without looking. The research on vision machines was mainly conducted at the Stanford Research Institute in the US. So, we can say that the events that took place in the Kosovo War were a total confirmation of the thesis of *The Vision Machine*.
- JA: Turning to vision machines of a different variety, to what extent do you think that watching the Kosovo War on TV reduced us all to a state of 'polar inertia', to the status of Howard Hughes, the imprisoned and impotent state of what you call 'technological monks'?<sup>31</sup>

PV: There can be no doubt about this. It even held true for the soldiers involved in the Kosovo War. For the soldiers stayed mostly in their barracks! In this way, polar inertia has truly become a *mass phenomenon*. And not only for the TV audiences watching the war at home but also for the army that watches the battle from the barracks. Today, *the army only occupies the territory once the war is over*. Clearly, there is a kind of inertia here. Moreover, I would like to say that the sort of polar inertia we witnessed in the Kosovo War, the polar inertia involving 'automated war' and 'war-at-a-distance' is also terribly weak in the face of terrorism. For instance, in such situations, any individual who decides to place or throw a bomb can simply walk away. He or she *has the freedom to move*. This also applies to militant political groups and their actions. Look at the Intifadah in Jerusalem. One cannot understand that phenomenon, a phenomenon where people, often very young boys, are successfully harassing one of the best armies in the world, without appreciating their freedom to move!

JA: Jean Baudrillard famously argued that '*The Gulf War Did Not Take Place*' (1995). Could it be argued that the Kosovo War did not take place?<sup>32</sup>

PV: Although Jean Baudrillard is a friend of mine, I do not agree with him on that one! For me, the significance of the war in Kosovo was that it was a war that moved into space. For instance, the Persian Gulf War was a miniature world war. It took place in a small geographical area. In this sense it was a local war. But it was one that made use of all the power normally reserved for global war. However, the Kosovo War took place in orbital space. In other words, war now takes place in 'aero-electromagnetic space'. It is equivalent to the birth of a new type of flotilla, a home fleet, of a new type of naval power, but in orbital space!

JA: But what, in this instance, constitutes the flotilla, the fleet, or the new type of naval power? The Cruise missiles?

PV: The flotilla is made up of the robots, the drones, the missiles, the planes and the satellites. For these machines are the new cruisers, the new dreadnoughts and the new gunboats. Let us take an example. How did France or Britain proceed to conquer their former colonies? They took their fleet and their whole naval power to the shores of a country like Morocco and then began shooting, thereby conveying the message to the local inhabitants to leave the area or else! At that point, one lands one's troops and sets up a colonial trading outpost while simultaneously

building roads in order to gain access to slaves, minerals and so forth. What I am describing here is the classic colonial outpost. But, today, one conquers a colony by taking one's fleet to the airspace of a region such as Kosovo. And success is achieved through the application of the techniques of cyberwar, through the techniques of global air war. Colonialism today is therefore no longer a French or a British affair. It is a new kind of colonialism. It is the media colonialism of modernity, a colonialism that does not involve the taking of slaves but does involve *the law of the air taking over from the law of the land!*

*JA:* How do these developments relate to Global Positioning Systems (GPS)? For example, in *The Art of the Motor* (1995), you were very interested in the relationship between globalization, physical space and the phenomenon of virtual spaces, positioning, or, 'delocalization'. In what ways, if any, do you think that militarized GPS played a 'delocalizing' role in the war in Kosovo?<sup>33</sup>

*PV:* GPS not only played a large and delocalizing role in the war in Kosovo but is increasingly playing a role in social life. For instance, it was the GPS that directed the planes, the missiles and the bombs to localized targets in Kosovo. But may I remind you that the bombs that were dropped by the B-2 plane on the Chinese embassy – or at least that is what we were told – were GPS bombs. And the B-2 flew in from the United States. However, GPS are everywhere. They are in cars. They were even in the half-tracks that, initially at least, were going to make the ground invasion in Kosovo possible. Yet, for all the sophistication of GPS, there still remain numerous problems with their use. The most obvious problem in this context is the problem of landmines. For example, when the French troops went into Kosovo they were told that they were going to enter in half-tracks, over the open fields. But their leaders had forgotten about the landmines. And this was a major problem because, these days, landmines are no longer localized. They are launched via tubes and distributed haphazardly over the territory. As a result, one cannot remove them after the war because one cannot find them! And yet the ability to detect such landmines, especially in a global war of movement, is absolutely crucial. Thus, for the US, GPS are a form of sovereignty! It is hardly surprising, then, that the EU has proposed its own GPS in order to be able to localize and to compete with the American GPS. As I have said before, sovereignty no longer resides in the territory itself, but in the control of the territory. And localization is an inherent part of that territorial control. As I pointed out in *The Art of the Motor* and elsewhere, from now on we need *two* watches: a wristwatch to tell us what time it is and a GPS watch to tell us what space it is!

JA: Given your analysis of technology and the general accident in recent works such as *Open Sky* (1997), *La Bombe informatique* (1998) and *Politics of the Very Worst* (1999), I would like to focus on the prospective counter-measures to such developments. Are there, in your view, any obvious strategies of resistance that can be deployed against the relentless advance of automation?<sup>34</sup>

PV: Resistance is *always* possible! But we must engage in resistance first of all by developing the idea of a technological culture. However, at the present time, this idea is grossly underdeveloped. For example, we have developed an artistic and a literary culture. Nevertheless, the ideals of technological culture remain underdeveloped and therefore outside of popular culture and the practical ideals of democracy. This is also why society as a whole has no control over technological developments. And this is one of the gravest threats to democracy in the near future. It is, then, imperative to develop a democratic technological culture. Even among the elite, in government circles, technological culture is somewhat deficient. I could give examples of cabinet ministers, including defence ministers, who have no technological culture at all. In other words, what I am suggesting is that the hype generated by the publicity around the Internet and so on is not counter-balanced by a political intelligence that is based on a technological culture. For instance, in 1999, Bill Gates not only published a new book on work at the speed of thought but also detailed how Microsoft's 'Falconview' software would enable the destruction of bridges in Kosovo. Thus it is no longer a Caesar or a Napoleon who decides on the fate of any particular war but a piece of software! In short, the political intelligence of war and the political intelligence of society no longer penetrate the techno-scientific world. Or, let us put it this way, techno-scientific intelligence is presently insufficiently spread among society at large to enable us to *interpret* the sorts of techno-scientific advances that are taking shape today.

JA: Finally, now that *Stratégie de la déception* has been published, could you indicate what future projects you might consider working on and why they might be of interest to you?

PV: Well, I could say something about what I feel I did not expand on enough in the book and that is the new dimensions of 'humanitarian' warfare. There is, for example, a lot of research required on the technical and the social dimensions of this new type of so-called 'just war'. And this is something where I think the International Court on War Crimes in the Balkans needs to be more involved. This is because the invention of the 'secular holy war', the invention of the 'secular crusade' are, to my

mind, inventions of major importance. Such inventions are landmarks in Western history. In this respect, we have a lot of work to do on the nature and complexity of militarized 'humanitarian' intervention. This work is, of course, both political and legal in nature. However, in my opinion, without it, we are heading for a frightful regression. It will be a regression towards the state of nature, that is, towards the permanent state of war of all against all. And, as far as I can see if such developments are allowed to come to pass, there will be no end to it. In the name of the right to intervene, we will end up waging war against each other all the time. Therefore, there will be a regression from the formally regulated state of war. For what is starting to take place in Kosovo and elsewhere is that the achievements of regulated warfare are being threatened with extinction. For example, President Clinton stated that the war in Kosovo was not a war but a 'police operation' against 'rogue states'. This is very serious indeed and not simply because it opens the door to all kinds of aberrations. It is very serious because it means that while the Kosovo War *did* take place, it was never declared!

*Translated by Patrice Riemens.*

#### Notes

'The Kosovo War Did Take Place' was conducted by John Armitage on 13 September 1999 at the Ecole Spéciale d'Architecture in Paris. An edited version of this interview, 'The Kosovo War Took Place in Orbital Space: Paul Virilio in Conversation with John Armitage', appeared in the electronic journal *CTheory*, ([www.ctheory.com](http://www.ctheory.com)) on 18 October 2000. The interview could not have taken place without the continued interest, goodwill and generosity of Paul Virilio and Patrice Riemens. I would like to record my sincere thanks to them both. I would also like to formally thank Verena Andermatt Conley and Cathryn Vasseleu for their valuable comments on an earlier draft of this interview.

1. See P. Virilio (1999) *Stratégie de la déception* (Paris: Galilée). Since this interview was conducted, this book has been translated and published in English as P. Virilio (2000) *Strategy of Deception*, trans. C. Turner (London: Verso).

2. The most important references relating to Virilio's concept of the information bomb are the following: P. Virilio and F. Kittler (1999) 'The Information Bomb: A Conversation', trans. P. Riemens (edited and introduced by J. Armitage). The latter can be found in this volume and in J. Armitage (ed.) (1999) *Machinic Modulations: New Cultural Theory and Technopolitics*. Special Issue. *Angelaki* 4 (2) (September): 81–90; P. Virilio (1998) *La Bombe informatique* (Paris: Galilée). For a review of *La Bombe informatique*, see, for example, J. Armitage (2000) 'The Theorist of Speed', *New Left Review*, No. 2 (March/April), Second Series: 145–7. The English translation of *La Bombe informatique* has recently been published as P. Virilio (2000) *The Information Bomb*, trans. C. Turner (London: Verso). In particular, see Chapter 14, p. 134 of the English translation, where this quotation is taken from.

3. Virilio elaborates his ideas on history, progress and the speed of weapons systems mainly in his *Speed and Politics: An Essay on Dromology* (1986 [1977]), trans. M. Polizzotti (New York: Semiotext (e)). In particular, see Part 3, Chapter 1, 'Unable Bodies', pp. 61–74.

4. See P. Virilio and S. Lotringer (1997 [1983]) *Pure War*, trans. M. Polizzotti, revised edition (New York: Semiotext (e)).

5. Virilio's views on the Persian Gulf War are to be found in his *L'Écran du désert: chroniques de guerre* (1991) (Paris: Galilée). This book has recently been translated and published in English



as P. Virilio (2001) *Desert Screen: War at the Speed of Light*, trans. M. Degener (London: The Athlone Press). For an alternative perspective but one that also views the Persian Gulf War not as the first 'postmodern war' but as the last modern war see: M. Ignatieff (2000) *Virtual War: Kosovo and Beyond* (London: Chatto and Windus). Virilio and Ignatieff differ in their analyses of the Persian Gulf War and the Kosovo War. However, they do inadvertently agree that it is probably incorrect to view the Persian Gulf War as the first postmodern war. The latter view is normally attributed (usually by others) to Jean Baudrillard's (1995 [1991]) *The Gulf War Did Not Take Place*, trans. P. Patton (Sydney: Power Institute).

6. On the continued rise of private armies in the post-Cold War era, see, for example, K. Silverstein (2000) *Private Warriors* (London: Verso).

7. See P. Virilio (1989 [1984]) *War and Cinema: The Logistics of Perception* (London: Verso).

8. Virilio discusses his thoughts on 'the fleet in being' in *Speed and Politics: An Essay on Dromology* (see Note 3). In particular, see Part 2, Chapter 1, 'From Space Right to State Right', pp. 37–49.

9. For Virilio's detailed essay on vision machines see: P. Virilio (1994 [1988]) *The Vision Machine*, trans. J. Rose (London, Bloomington and Indianapolis: British Film Institute and Indiana University Press).

10. See P. Virilio (1994 [1975]) *Bunker Archeology*, trans. G. Collins (Princeton: Princeton Architectural Press); and P. Virilio (1976) *L'Insécurité du territoire* (Paris: Stock).

11. Virilio's concept of 'the aesthetics of disappearance' first appears in *Bunker Archeology* (see Note 10). See also P. Virilio (1991 [1980]) *The Aesthetics of Disappearance*, trans. P. Beitchman (New York: Semiotext (e)).

12. On *Architecture Principe* see, for example, P. Virilio and C. Parent (eds) (1996) *Architecture Principe, 1966 et 1996* (Besançon: L'Imprimeur).

13. See P. Virilio (1986) 'The privatisation of war', trans. M. Imrie, *New Statesman*, 112 (10 October): 19.

14. See S. Žižek (1999) 'Against the double blackmail', *New Left Review*, 234 (March/April): 76–82.

15. Claudio Magris is an Italian essayist, Professor of German Literature at the University of Trieste, and a regular contributor to European newspapers and magazines. Born in Trieste in 1939, Magris's writings explore the idea of European culture from the standpoint of a literary historian and social critic. Increasingly influential in European intellectual circles, Magris's latest book to be published in English is *Microcosms* (2000), trans. I. Halliday (London: The Harvill Press).

16. Peter Handke (1942– ) is an Austrian writer, translator, film author and director. However, and although Handke has long been associated with the European literary *avant-garde*, he recently caused much controversy in Europe through his efforts to re-conceptualize the West's view of Milošević's Serbia. Handke's views on Serbia are contained in his book entitled *Journey to the Rivers: Justice for Serbia* (1997), trans. S. Abbott (London: Viking). Like Virilio, numerous other radical cultural theorists and European intellectuals have denounced Handke's book.

17. See E. Said (1999) 'Protecting the Kosovars?', *New Left Review*, 234 (March/April): 73–5.

18. Generally, Virilio presents himself as a 'critic of the art of technology' rather than as a particular critic of the Internet. However, in recent books and book-length interviews he has written and spoken of the potential for destruction inherent in the Internet. See, for example, P. Virilio and S. Lotringer (1997 [1983]) *Pure War*, trans. M. Polizzotti and B. O'Keeffe (New York: Semiotext (e)); P. Virilio (1997 [1995]) *Open Sky*, trans. J. Rose (London: Verso); P. Virilio and P. Petit (1999 [1996]) *Politics of the Very Worst*, trans. M. Cavaliere (New York: Semiotext (e)); and P. Virilio (2000 [1998]) *The Information Bomb*, trans. C. Turner (London: Verso).

19. Nicholas Negroponte is well known for his work on the Internet at MIT. He is a regular contributor to *Wired* magazine and the author of *Being Digital* (1995) (London: Hodder and Stoughton).

20. Hypermodernism is a theoretical term I have used to describe Virilio's cultural conception of the social implications of militarization. See, for example, my other interview in this collection and J. Armitage (ed.) (2000) *Paul Virilio: From Modernism to Hypermodernism and Beyond* (London: Sage Publications in association with *Theory, Culture and Society*).

21. Michel Foucault's description and analysis of the Panopticon can be found in his *Discipline and Punish: The Birth of the Prison* (1977), trans. A. Sheridan. (Harmondsworth: Penguin).
22. On *L'Insécurité du territoire* see Note 10. Virilio's essay on 'The Suicidal State' can be found in J. Der Derian (ed.) (1998) *The Virilio Reader*, trans. J. Der Derian, M. Degener and L. Osepchuk (Oxford: Blackwell), pp. 29–45.
23. Virilio's idea that 'history progresses at the speed of its weapons systems' can be found in *Speed and Politics: An Essay on Dromology* (see Note 3). In particular, see Part 3, Chapter 1, 'Unable Bodies', pp. 61–74.
24. See P. Virilio (1990 [1978]) *Popular Defense and Ecological Struggles*, trans. M. Polizzotti (New York: Semiotext (e)). In particular, see Part 2, 'Revolutionary Resistance', pp. 41–106.
25. On Marinetti and the Futurist tradition in modern art see C. Tisdall and A. Bozzolla (1977) *Futurism* (London: Thames and Hudson). Walter Benjamin's discussion on the aesthetics of war can be found in his essay 'The work of art in the age of mechanical reproduction' in his *Illuminations* (1968) (New York: Schocken Books), pp. 217–52. On Virilio's *The Aesthetics of Disappearance* see Note 11.
26. See Sun Tzu (1993 [ancient Chinese text]) *The Art of War* (Ware: Wordsworth Editions).
27. See R. Kapuscinski (1999) 'New censorship, subtle manipulation', *Le monde diplomatique* (English electronic edition), September.
28. See P. Virilio (1991 [1984]) 'The overexposed city', trans. D. Moshenberg, in *The Lost Dimension* (New York: Semiotext (e)), pp. 9–28.
29. See R. Barthes (1993 [1957]) 'The jet-man', trans. A. Lavers, in *Mythologies* (London: Vintage), pp. 71–3.
30. For a discussion of these issues see Virilio's *The Vision Machine* (see Note 9).
31. See P. Virilio (1999 [1980]) *Polar Inertia*, trans. P. Camiller (London: Sage Publications in association with *Theory, Culture and Society*); *The Aesthetics of Disappearance* (see Note 11); P. Virilio (1999 [1996]) *Politics of the Very Worst*, trans. M. Cavaliere (New York: Semiotext (e)).
32. See Note 5.
33. See P. Virilio (1995 [1993]) *The Art of the Motor*, trans. J. Rose (Minneapolis: University of Minnesota Press).
34. See P. Virilio (1997 [1995]) *Open Sky*, trans. J. Rose (London: Verso); *La Bombe informatique* (see Note 2); and *Politics of the Very Worst* (see Note 28).

**5. One form and statement referred to in regulations 4.4.6 (co-authored work) and 4.4.7.**

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Towards a Political Economy of Speed', in  
Parallax Issue 18 January - March 2001, Vol 7 No 1,  
'economies of excess', guest editor: John Armitage  
pages 111 - 123.

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